

Software Product Release <Coffee Detective>

Prepared by

<Hadeel Quayyid, 441200913>
< Noura alsultan, 441201306>
< Nouf alfulaij 441201159>
< Seba alahmdi, 439201336>

Supervised by
< Nora al Madi>

IT 320 Course Project
Semester-2, 1443H (Spring 2022)

Table of Contents

1 CHAPTER 1: INTRODUCTION	3
1.1 THE PROBLEM	3
1.2 THE SOLUTION	3
1.3 THE PRODUCT.....	3
1.3.1 <i>Product Vision</i>	4
1.3.2 <i>Product Roadmap</i>	5
1.3.3 <i>Objectives</i>	5
1.3.4 <i>Scope</i>	6
1.4 THE SCRUM TEAM.....	6
2 CHAPTER 2: DOMAIN ANALYSIS	7
2.1 TERMINOLOGY	7
2.2 GENERAL DOMAIN KNOWLEDGE	8
2.3 CUSTOMERS AND USERS.....	8
2.4 THE ENVIRONMENT	8
2.5 TASKS AND PROCEDURES	9
2.6 COMPETING SOFTWARE.....	9
2.7 SIMILARITIES ACROSS DOMAINS AND ORGANIZATIONS	10
3 CHAPTER 3: REQUIREMENTS ENGINEERING.....	10
3.1 SYSTEM USERS.....	11
3.2 USE CASE DIAGRAM	11
3.3 PRODUCT BACKLOG	13
3.4 DEFINITION OF DONE	20
4 CHAPTER 4: SYSTEM DESIGN.....	21
4.1 SYSTEM ARCHITECTURE	21
4.2 CLASS DIAGRAM	23
4.3 DATA DESIGN	23
4.4 COMPONENT DESIGN.....	27
4.5 INTERFACE DESIGN	30
5 CHAPTER 5: IMPLEMENTATION.....	72
6 CHAPTER 6: TESTING	72
6.1 USER STORY ACCEPTANCE TESTING.....	73
6.2 INTEGRATION TESTING	77
6.3 USER ACCEPTANCE TESTING.....	84
6.3.1 <i>Demographics of participants</i>	84
6.3.2 <i>Questionnaire</i>	85
7 CHAPTER 7: CONCLUSION AND FUTURE WORK.....	87
7.1 CONCLUSION	87
7.2 FUTURE WORK	87
8 REFERENCES	87

IT 320 Course Project
Semester-2, 1443H (Spring 2022)

1 Chapter 1: Introduction

Riyadh city is on its way to becoming a city of the future that will attract families and individuals who are looking for a quality lifestyle. Riyadh is hosting many international cafes, and there is always a new local coffee shop open every day, which does not always have the advertisements that they deserve/need, since people nowadays rely on social media to get reviews which most of the time are fake and not honest reviews, people are getting confused about the quality and taste of these coffee shops and whether it is a trustworthy place that deserves to be visited or not.

In this document, we will gather information to help us build a review website about coffeeshops in Riyadh, such as the problem we addressed, and to help us find solutions that our website gives to the users, define the product vision will serve as a guide for the stakeholders, as it will remind us of the general direction the product should be taking, and the common objectives within the team, the scope of functions that the website will provide and find the suitable requirement and write them as user story and then design and implement them and finally testing with different potential users . Finally, we're interested in creating a technological solution (A website) called Coffee Detective that provide reviews on different coffee shops in Riyadh city that would make it easier for the user to choose a coffee shop to visit that suite their tastes, and to advertise to newlocal coffee shops.

1.1 The Problem

Riyadh is becoming the fastest growing coffee market in the Middle East, so, with the increasing number of coffee shops in Riyadh some people especially coffee lovers, find difficulties deciding which Coffee Shop they want to visit also, small local coffee shops that have an exceptional quality of coffee beans, pleasant atmosphere and great service are suffering from poor visitors, so they are not receiving the recognition that they deserve.

By helping people discovering newly open cafes in Riyadh including the local small coffee shops with poor visitors and be able to see the reviews on them coffee lovers will be able to choose the café that suits their own needs at the same time local cafes will get the attention that they deserve. by Developing coffee reviews website, it will help coffee lovers to achieve their personal goal of finding the best coffee shop and comparing between the cafés in shortest and easy way.

1.2 The Solution

By building a website that has a lot of features, one of the most helpful features is that the website suggests all NEW open coffee shops available in Riyadh city, and the users can give reviews or see others' honest reviews in order to decide whether they are interested in visiting or not. By gathering all reviews from different users about different coffee shops on one website, the user will not be misled or distracted from fake social media ads and find the coffee shops that they are interested in, and their reviews in an effortless way. By discovering our website and reading all the different reviews, we may increase the sales of some small local cafes which have poor advertising and enhance the experience of coffee lovers.

IT 320 Course Project
Semester-2, 1443H (Spring 2022)

1.3 The Product

In this section we're going to talk about our product vision, product roadmap and system objectives.

1.3.1 Product Vision

The product vision is “*a brief statement of the desired future state that would be achieved by developing and deploying a product. A good vision should be simple to state and provide a coherent direction to the people who are asked to realize it.*” [1]

Product Vision:

For a _____ coffee lovers _____ (*a target customer*)

Who _____ Who want to try new and tasty coffee in Riyadh city _____ (*statement of need or opportunity*)

The _____ coffee detective _____ (*product name*) is a _____ website _____ (*product category*)

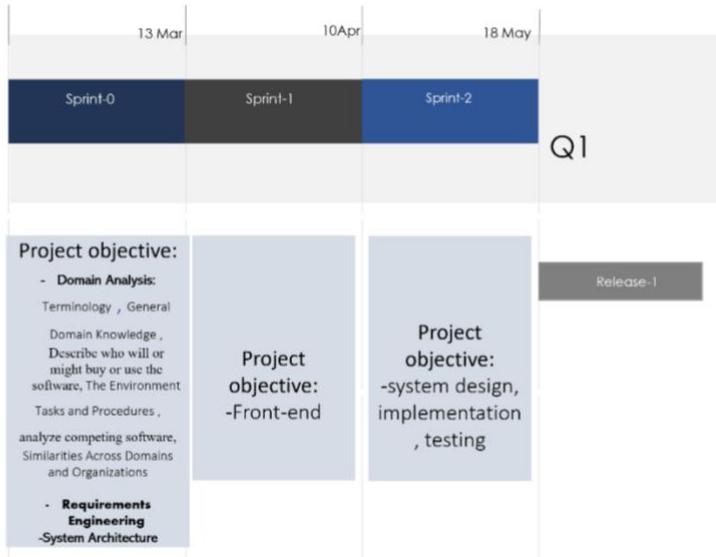
That _____ Provide review of coffee shops in Riyadh _____ (*key benefit/ reason to buy*)

Unlike _____ Other coffee shops reviews websites _____ (*primary competitive alternative*)

Our product _____ suggest all new open available coffee shops in Riyadh and see/add reviews about it _____ (*statement of primary differentiation*)

IT 320 Course Project
Semester-2, 1443H (Spring 2022)

1.3.2 Product Roadmap



1.3.3 Objectives

Product (customer focus-value):

The increasing number of coffee shops in Riyadh make it difficult for coffee lovers to decide which coffee shops they want to visit, to help them by building this product (website) that include some feature:

- Users can see all reviews in an easy and convenient way
- Website will suggest all new available coffee shops in Riyadh city to help users discover as fast as possible and give reviews on it
- Increase the trust between the users and our website
- Give more specific reviews of every coffee shop branch (as some coffee shops branch of the same company have different quality of the same beverage)
- Users have the freedom to delete and update reviews whenever they want
- Admin can add coffee shops and delete, Update to increase the number of visitors and keep the website service the requirement that users need it.
- Admin can notify the users about newly open coffee shops to help users to find any coffee quickly and to help the coffee which is newly open to notify the users about them.
- Admin can view the reviews and he /she can decide which kind of coffee shops the users prefer so he /she can improve the website functionality and to increase the visitors of the website.
- The website is usability for the admin the learn how to use the main functionality of the system within 5-10 minutes so that save their time and don't get frustrated.

IT 320 Course Project
Semester-2, 1443H (Spring 2022)

Project (solution focus-plan):

- domain analysis:
terminology, general domain knowledge, describe who will or might buy our software and environment which describe equipment and system used, tasks and procedure currently performed, competing software.
- Requirement Discovery:
Interview, Questionnaires, prototypes to help stakeholders understand what the system will be like.
- Product backlog: contains priority list of user requirements.
- Architectural design: design Database, interface design
- Development
- Test and feedback

Learning (student focus):

This project will help us to learn about php, CSS, html and how to use git and GitHub to communicate and working with each other easily and use Jira to manage the sprint and developing software by using agile process.

1.3.4 Scope

The website will cover several main functions such as, admins can sign up, log in, logout, view coffee shops and their reviews, add coffee shops, update, and delete them.

And the other users can search, view and post reviews. Website will Suggest all NEW available open coffee shops to the user and can view, post reviews. The website will be written in html, CSS, JavaScript and php.

The things that the website won't be cover are, the website won't suggest the new coffee shops based on the user's graphical locations, also users can't rate the review, the website won't support other languages except English. or reviews of coffee shops in other places than Riyadh city.

1.4 The Scrum Team

Scrum Team	
Product Owner (PO):	Hadeel bin Quayyid
Developers:	Nouf alfulaij , Noura alsultan , Seba alahmdi, Hadeel bin queed
Scrum Master (SM):	Nora al madi
Stakeholders:	Nora al madi

IT 320 Course Project
Semester-2, 1443H (Spring 2022)

2 Chapter 2: Domain Analysis

This chapter describes background information that has been gathered about coffee shops in Riyadh and how famous they are now. This information is to be used to guide us to better understand our domain and better develop our website. We gathered this information from online resources such as:([arabnews](#), [perfectdailygrind.com](#), [esquirescoffee.co](#)).

According to “international comincaffe,” Riyadh is the fastest growing coffee market in the Middle east. Riyadh has a fascinating history with coffee. Specialty coffee started just recently in Riyadh, but it is catching up surprisingly fast. More coffee shops are opening, it’s at a high these years and predicted to grow even more in the next years.

For growing numbers of Saudis, the choice is more likely to be a latte, cappuccino, frappe, or macchiato served in one of the many caffes that have popped up around Riyadh in recent years.

In every region of Riyadh today, coffee is replacing traditional beverages as a central part of the modern lifestyle.

Grabbing an early morning and lunchtime coffee has become a part of office workers’ daily routine, while others visit a cafe to enjoy their favorite cup while sitting and chatting.

2.1 Terminology

- Newly opened:** new coffee shops that opened lately in Riyadh.
- Outdoors:** Type of place of coffee shop that is external of a building.
- Indoors:** Type of place of coffee shop that is interior of a building.
- Specialty coffee:** Is coffee scoring 80 points or above on a 100-point scale.
- Coffee lovers:** People who like coffee the most and it is part of their everyday routine.
- Advanced search:** Feature that allows a user to specify additional requirements for a search (category search).
- Pervious attachment:** The history for anything has been posted (previous review, previous upload pic, etc.)
- Notify:** Post a new opened coffee shop with their lunching date.

IT 320 Course Project
Semester-2, 1443H (Spring 2022)

2.2 General Domain Knowledge

In coffee shops no law states that you must undertake formal training to open a coffee shop, but you will be required to have training on food safety and hygiene if you are the one responsible for developing your café's food safety management procedures.

- Picking the right location increases the number of customers thus increases the income of the coffee shop.
- Coffee shops usually open early, especially during weekdays so people can have their morning coffee.
- There is a variety types of coffee shops (indoor, outdoor ...)
- Some of coffee shops pioneers in Riyadh are Roasting House, Camel Step Coffee Roasters and Exlixir Bunn.
- One of the targets of 2030 visions is to increase the number of coffee shops to be for 258 cafes per million citizens by 2020, and 1032 cafes per million citizens by 2030.
- According to the World Coffee Portal's 2021 survey, over a fifth of Riyadh coffee drinkers have four or more cups of coffee a day – that is a lot of opportunity for coffee shops to shine. From the same survey, over a fifth also stated they visited a coffee shop up to three times a week.
- A customer who is pleasure about the service or the quality will 90% visit the coffee shop again.
- Most coffee shops have training sessions that cover how much of each ingredient goes into the drinks on your menu as well as which type of cup to use when serving them.

2.3 Customers and Users

Potential clients are the owners of coffee shops, and as well as users who are interested in coffee shops and the An administrator to manage the website.

There are many Potential clients:

- Coffee lovers whose looking for unforgettable coffee shop experiences.
- Owner of coffee shop and workers who are interested in their customers' reviews, to improve their service and keep satisfying them.
- Tourists who are visiting Riyadh and looking forward to trying different coffee shops in Riyadh.
- Coffee shop owners who want to advertise their shop.
- An administrator to manage the website.

2.4 The Environment

The environment is a stand-alone web-based system that works in a browser that allows coffee loversto review coffee shops in Riyadh.

IT 320 Course Project

Semester-2, 1443H (Spring 2022)

2.5 Tasks and Procedures

Several ways coffee lovers follow to find reviews on coffee shops:

- Social media & TV advertisements which most of the time are fake not honest reviews.
- Asking friends and family for coffee shops suggestions but it is usually misleading.
- Find reviews about coffee shops in Food & Drink Magazine.

2.6 Competing Software

In this section we did a competitive product analysis, before building our website, we searched for competing software to learn about the strengths and weaknesses of existing similar products, and we analyzed competing software as shown in the table below.

Features	Foursquare	Coffee review	Coffee geek	Coffee Detective (Our website)
Advanced Search (with category)	✓	✓	✓	✓
The user can add a review	✓		✓	✓
The user can see all coffee shops social media apps	✓			
The user can check in for particular coffee	✓			
The system can provide general information about coffee		✓	✓	
The user can upload pictures of a particular coffee	✓		✓	
The user can delete a review	✓		✓	✓
The user can see coffee shops based on graphical location	✓			
The system allows the user to show his previous attachments	✓			
The system notifies the user about new available open coffee shops				✓

IT 320 Course Project
Semester-2, 1443H (Spring 2022)

Summary: We found that: all systems provide **advanced search** meaning that user can search in categories way, it is an important feature so we will apply it in our website. For **adding review**, and **delete review** features it was not implemented in coffee review website, while **upload picture** of particular coffee shop was not implemented in our website (coffee deductive), Foursquare website was the only system that provide that **user can see all social media apps for all coffee shops**, the **user can see coffee shops based on graphical location** and the **system allows the user to show his reviews attachments**. **provide general information about coffee shops** was implemented in coffee review and coffee geek websites but we will not implement it. Also, the **check-in for a particular coffee** feature was implemented on Foursquare website. On top of that our website has features those other websites do not have, which is **the system notifies the user about new available open coffee shops**.

2.7 Similarities Across Domains and Organizations

In “Reviews websites” domain like (Foursquare) the similarity with our website is view, add, deletereviews and search for specific options. In “coffee shop reviews” domain like (Coffee geek) domain the similarities are search for specialty cafes with high reviews. Our website has featured those other websites do not have, which is **the system notifies the user about new available open coffee shops**. In (Foursquare) website the user can see coffee shops based on graphical location and the system allows the user to show his reviews attachments which we can use to enhance our website in the future.

Our website is focused on coffee shops reviews, so it combines these features to get reviews and high rated coffee shops in Riyadh.

3 Chapter 3: Requirements Engineering

In this chapter, first we used several methods to collect information about the requirements that our potential customers (our source of information which are the stakeholders) wish to have on our website, like: (1- interviews: we interviewed 2 different individuals and asked them 5 different questions that helped us to collect their answers and opinion and observe their body language and emotions during the interview to understand their needs. 2- questioner: we did 6 closed questions questioners for a sample. 3-Documentation) after that we defined the system users who are using our system and their characteristics then we design a use case diagram to find the possible sequences of interaction between our system and the actors ,then we did our product backlog which is a prioritized list of desired product functionality and it shared understanding of what to build and the order in which to build it and The definition of done.

IT 320 Course Project Semester-2, 1443H (Spring 2022)

which is a checklist of the type of work that the team is expected to successfully complete before it can declare its work to be potentially shippable and we design the System architecture to know what the outside and inside our system.

according to the interviews we have done, we noticed that the users are interested in knowing what are the existing and new coffee shops in Riyadh and they seem to care about people's reviews about coffee shops also we find that our users prefer the categorical search instead of search bar Also, they prefer to use voice notes rating(which we think it a unique feature and we look forward to adopt this new feature in the future) or a textual rating furthermore, we found that they like and support the idea of the notification on the website which will notify the user about what are the newly opened coffee shops in Riyadh our users thinks that if they were notified this will help them increase their chance to try and review coffee shops that no one tries them before.

according to the Questioner results we found that 92.9% of our sample agreed that if they get notified when new coffee shop open, it will encourage them to visit that coffee shop. also, 80% of them have had unprofessional experience with coffee shops because they did not get the honest review, more than 50% of our sample prefer going out to take a coffee and they also find difficulty choosing the right coffee shop to visit, we also must keep in mind that we must provide a good user experience, so users do not suffer using our website.

3.1 System Users

Our website targets coffee lovers in Riyadh. Their characteristics are as follows: their age should be above 17 years regardless of their education level. Our website requires users and admin to know basic information about different coffees, they should know how to read/write and know how to use websites so they can interact and use the website. Users and admin range from computer novices to sophisticated programmers, they must have wi-fi and know how to use a web browser.

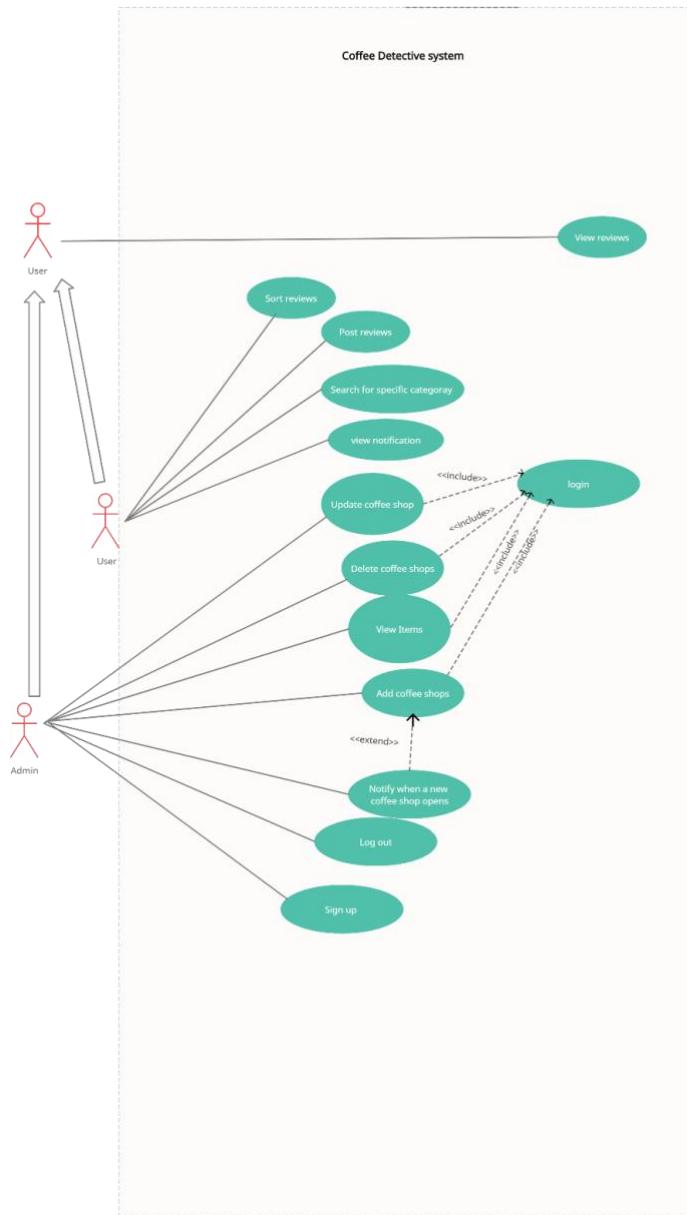
3.2 Use Case Diagram

In this section we use a case diagram to find the possible sequences of interaction between our system and the actors.

In the figure below you can see the system use case diagram that represent the 2 primary actors of our system and their use cases.

IT 320 Course Project

Semester-2, 1443H (Spring 2022)



Clarification: since the admin and the user can view reviews we did a generalization, one of the restrictions in the admin that he cannot do (Update, delete, view items, add, notify) unless he's logged in. The admin can add coffee shops as well as the new open coffee shops at their category with their launching date and the user can view the new open coffee shop notification category.

IT 320 Course Project
Semester-2, 1443H (Spring 2022)

3.3 Product Backlog

In this section we did our product backlog which is a prioritized list of desired product functionality and it shared understanding of what to build and the order in which to build it, and we provide the definition of ready It help us to know if a user story is ready to be taken into a sprint, meaning that the items at the top of the backlog should be ready to be moved into a sprint.

Definition of Ready	
<input type="checkbox"/>	Well-defined User story.
<input type="checkbox"/>	Acceptance criteria are clear and testable.
<input type="checkbox"/>	User stories understand by the team.
<input type="checkbox"/>	Business value is clearly articulated.
<input type="checkbox"/>	Estimated and small enough to be completed during a sprint.

IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

Sprint Number	PBI (user story)	Size (Story points)	Type (Feature, defect, technical work, knowledge acquisition)	Status (To do, in progress, or Done)	Acceptance Criteria The conditions of satisfaction that must be met for that item to be accepted.
2	As an admin, I want to Sign up so that I can create my own profile and manage it.	3	Feature	Done	<p>-As an Admin if I go to the sign-up page and fill in all the required fields (First and Last name, Username, Password) and click on sign up the message “the sign up was Successfully done” appears.</p> <p>As an Admin if I go to the sing up page and forget to fill one or more of the required fields and click on sign up then it indicted me to fill all fields.</p> <p>-As an Admin if I go to the sing up page and fill all required fields in sign up but the username already exists then the message "The admin username is already found into database" will appear.</p>
2	As an admin I want to login with my username and password so that I can authenticate against my profile.	3	Feature	Done	<p>-As an Admin if I go to the log in page and enter my Username and password click on log in then the system should allow me to access the information associated to me.</p>

IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

					As an Admin if I go to the log in page and enter my username and password but with incorrect password or username and click on log in then the log in fails with an error message that specifies that the username or password was wrong.
2	As an admin I want to log out so that I can keep my account secure from people who may be using my devices.	3	Feature	Done	As an admin if I click on the log out button the system should show me message indicate that I have logged out.
2	As an admin I want to be able to add coffee shops so that users can view and review coffee shops.	5	Feature	Done	As an admin if I go to the add a coffee shop and fill all the required information and click on add coffee shop and it was successfully added then the system should indicate that I have add a coffee shop. As an admin if I go to the add a coffee shop and forget to fill all required fields then the system indicated me to fill all fields.
2	As an admin I want to be able to add the newly open coffee shops at their category so that users can view new opened coffee shop notification and review them.	5	Feature	Done	As an admin if I go to the add a newly open coffee shop and fill all the required information and click on add coffee shop and it was successfully added then the system should indicate that I have add a coffee shop. As an admin if I go to the add a new coffee shop and forget to fill

IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

					one or more required fields then the system indicated me to fill all fields.
2	As a user I want to search about specific category of coffee shops so I can see a list of coffee shops matching my search in easy way.	13	Feature	Done	<p>AS a user if I click on a specific category then a list of coffee shops will appear with matching category.</p> <p>AS a user if I click on a specific category but if the category was empty then a message will appear that indicates that no coffee shops yet.</p>
2	As an admin, I want to update coffee shops so that the coffee could be up to date.	8	Feature	Done	<p>As an admin If I go to the update coffee shop page and fill in all required information and then click update then a confirmation message will indicate that I have updated the coffee shop.</p> <p>As an admin If I want to update items that I choose but the update was not successful because there are empty fields then the system will indicate me to fill all the fields.</p>
2	As an admin I want to delete coffee shop so that I can have more flexibility to remove coffee shops that I don't need.	8	Feature	Done	As an admin If I choose a coffee shop to delete and click delete then a

IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

					confirmation message indicates that the coffee shop is deleted successfully.
2	as user I want to be notified about new opened coffee shops so that I can get to know about new opened coffee and try them.	13	Feature	Done	<p>As a user if there was a new opened coffee shop then I want the system to notifies me when there is a new available coffee shop .</p> <p>As a user, if there were no new coffee shops then the system should indicate to me that there is no new coffee shop.</p>
2	as a user I want to view reviews so I can benefit from other reviews and decide whether I am interested in visiting it or not.	2	Feature	Done	<p>AS a user if I choose a category and then choose the coffee shop then I should be able to see all reviews .</p> <p>AS a user if I choose a category and then I choose coffee but the coffee was not reviewed yet the system should indicate me there are no reviews yet on this coffee shop.</p>
2	As a user I want to post review with date so I can share my experience about the coffee shop.	3	Feature	Done	<p>As a user, if fill all required fields of post , then should be posted in the system.</p> <p>if the review was not successful because there empty fields then the system indicates that the review was not successfully</p>

IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

					posted.
2	As an admin I want to view coffee shops and the reviews on coffee shops so that I can trace my system very well.	2	Feature	Done	As an admin if I go to coffee shops page, I want to be able to see list of the available coffee shops and if i choose a specific one I will be able to see the reviews on that coffee shops if any and if there is no reviews yet the system will show a massage that there is no reviews
2	As a user ,I want to sort reviews based on data ascending or descending so that help me to know about oldest and newest review.	2	Feature	Done	As a user, if I review the reviews of coffee shops and click on sort reviews based on dates ascending or descending then they will be Sorted based on which type of sort I choose.
1	As a user, I want to learn how to use the main functionality of the system within 5-10 minutes so that I save my time and don't get frustrated and find another site to use.	1	Feature	Done	Prototype will be given to 5 users with specific task to perform in order to manage the time needed and we will consider it acceptable if the time was 5-10 min To interact with the system
2	As a user, I want the website to be available 95% of the time, so that I can see the reviews whenever I try to access the website.	8	Feature	Done	As I user, if I access the website then it is available 95% of the time.

IT 320 Course Project
Semester-2, 1443H (Spring 2022)

User story:
functional requirement:

As an admin I want to be able to add coffee shops so that users can view and review coffee shops.

As an admin I want to Sing up so that I can create my own profile and manage it.

As an admin I want to login with my username and password so that I can authenticate against my profile.

As an admin I want to logo out so that I can keep my account secure form people who is may be using my devices.

As an admin I want to update items so that the items could be up to date

As an admin I want to delete coffee shops so that I can have more flexibility to remove coffee shops that I don't need

As an admin I want to be able to add the new open coffee shops at their category with their launching date so that users can view new opened coffee shop notification and review them

As an admin I want to view coffee shops and the reviews on coffee shops so that I can trace my system very well.

as user I want to be notified about new opened coffee shops so that I can get to know about new opened coffee and try them.

As a user I want to search about specific category of coffee shops so I can see a list of coffee shops matching my search in easy way.

As a user I want to view reviews so I can benefit from other reviews and decide wither i am interesting in visiting it or not

As a user I want to post review so I can share my experience about the coffee shop.

IT 320 Course Project
Semester-2, 1443H (Spring 2022)

Non-functional requirement:

Availability:

As a user, I want the website to be available 95% of the time, so that I can see the reviews whenever I try to access the website.

Usability:

As a user, I want to learn how to use the main functionality of the system within 5-10 minutes so that I save my time and don't get frustrated and find another site to use.

3.4 Definition of Done

In this section, we did the definition of done which is a checklist of the type of work that the team is expected to successfully complete before it can declare its work to be potentially shippable.

Definition of Done	
<input type="checkbox"/>	User story accepted by product owner
<input type="checkbox"/>	Code Completed <ul style="list-style-type: none">• Code checked in• Fix the bugs
<input type="checkbox"/>	Test <ul style="list-style-type: none">• User acceptance testing• Integration testing
<input type="checkbox"/>	Release environment made ready

IT 320 Course Project
Semester-2, 1443H (Spring 2022)

4 Chapter 4: System Design

In this chapter, we design our system's model. We chose our system architecture which is client-server and explained why we didn't choose the others, also we designed a diagram of the architecture we have chosen. Followed by a class diagram that shows the system structure of the code, in the data design section we described the data structure and contents. the system database, ER diagram, the relational schema, and data dictionary. In the component design section, we showed the design details of major system functionalities: add, search and post review. Lastly, the interface design where we show the system navigation diagram, list UX guidelines we incorporated while designing the interface and a descriptive information for each field that appears on the screen or user interface.

4.1 System Architecture

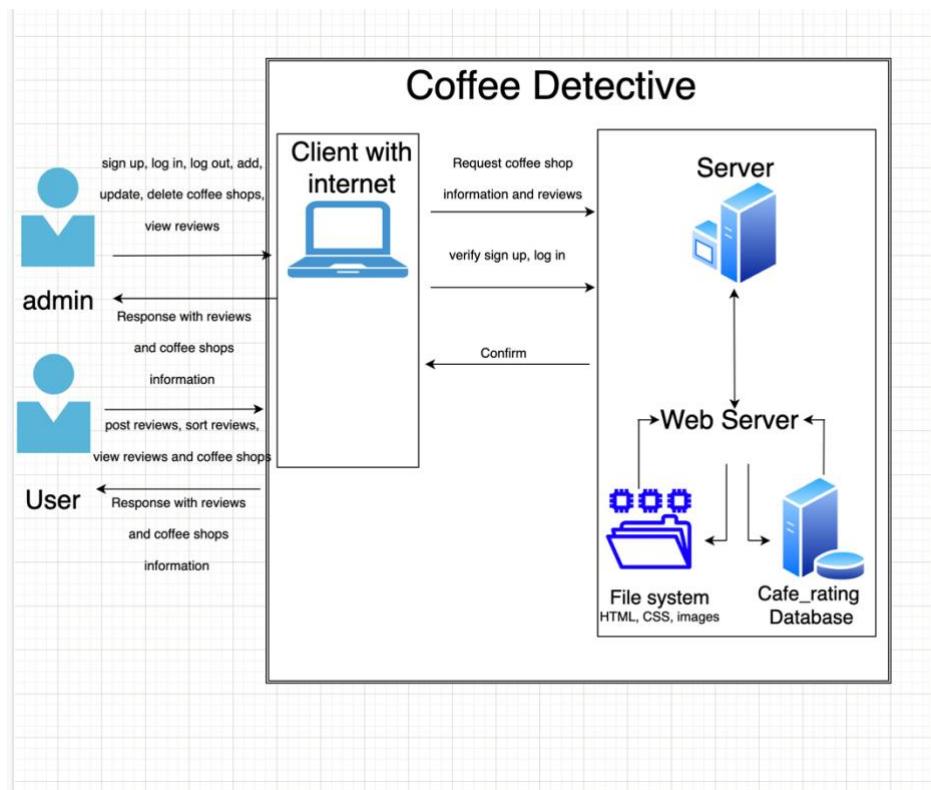
Coffee detective is a website that allows the user to ask for resources from the server that stores all the systems information in a database. We found that the Client-server model is the most appropriate architecture model for our system since we have an online website and the users of our system request services from the server and the server responds back, also within this type of model, more clients and servers can be embedded into the server, which makes the performance outstanding and increases the model's overall flexibility.

We didn't find the other architecture suitable because:

- MVC model is used when there are multiple ways to view and interact with the data also it involves additional code and data complexity when the data model and interaction are simple. It is not suitable for our system since Coffee detective is simple.
- Layered Architecture Model is usually used when security is important and our system does not have sensitive/private information, also the performance in our system is a high priority, in Layered model the performance may be decreased.
- Repository Architecture is used when a large amount of data is to be shared and when the components can be independent, where our system doesn't have large, shared data and the component are dependent, also the Repository Architecture is a single point of failure so problems in the Repository affect the whole system.
- Pipe and Filter Architecture cannot be implemented in our system because our system requires an interactive system that allows the clients to interact with the server.

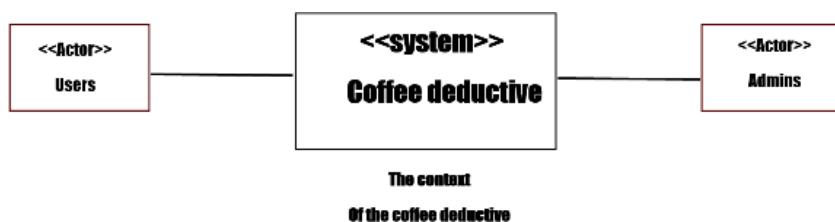
IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

Client- server model:



Context diagram:

Our system is a stand-alone coffee shops review website that allows users to view the reviews of coffee shops, add reviews on different coffee shops in Riyadh to share their experience with people, as well as allow the users to search with specific categories outdoor, indoor, and new coffee shops. In addition, it allows the administrator to sign up, log in to manage the website and notify the users of all new open coffee shops in Riyadh and have the ability to add, delete, update coffee shops, view items and reviews. Our website will be written in HTML, CSS, JavaScript, and Php. our system does not depend on any sub-systems, so instead of describing the context diagram with sub-systems we describe it by our system actors as shown in the figure below:

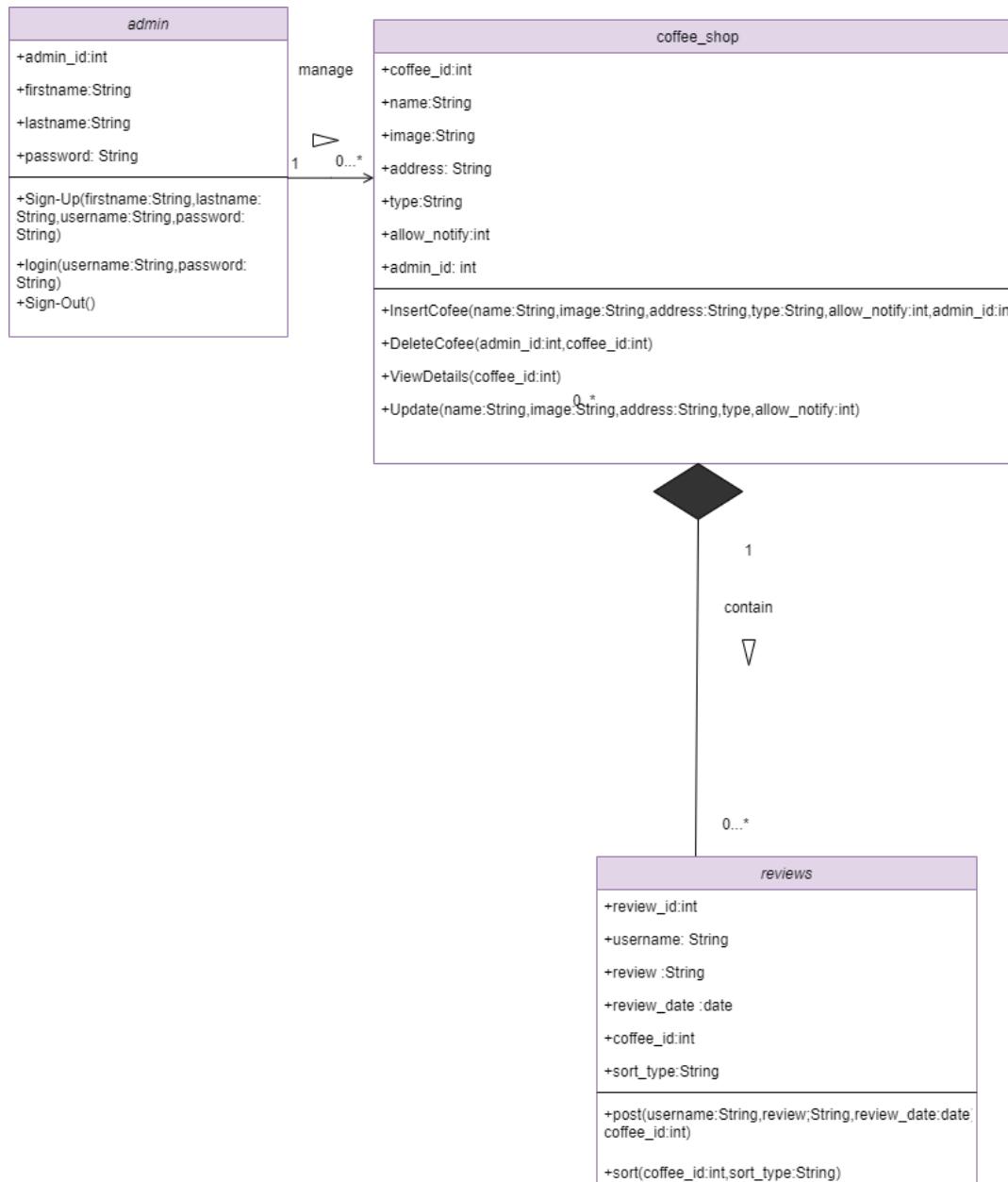


IT 320 Course Project

Semester-2, 1443H (Spring 2022)

4.2 Class Diagram

In this section we did a class diagram which is a static model that shows the classes and the relationship among classes that remain constant in the system. Our system “Coffee detective” composed of 3 classes “Object”: admin, coffee_shop and reviews.



IT 320 Course Project
Semester-2, 1443H (Spring 2022)

4.3 Data Design

The main role of data design is to illustrate what type of data are used and stored in the system. Data designing illustrates the types of data that are stored in the system, the relationships between them and the ways that data can be grouped or organized. In this section we showed Coffee Detective ER diagram, relational schema, and data dictionary.

- Schema:

admin (admin_id, firstname, lastname, username, password)
Primary key: admin_id

coffee_shop (coffee_id, name, image, address, type, allow_notify, admin_id)
Primary key: coffee_id
Foreign key: admin_id reference admin(admin_id)

reviews (review_id, username, review, review_date, coffee_id)
Primary key: review_id
Foreign key: coffee_id reference coffee_shop (coffee_id)

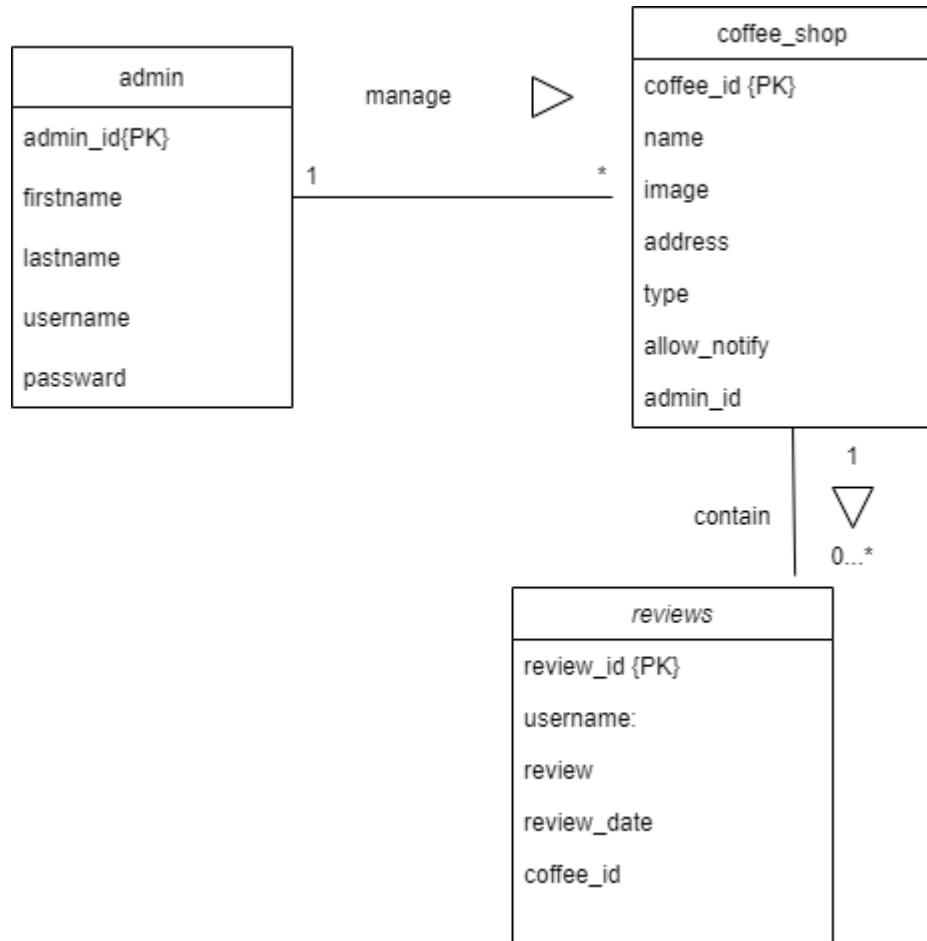
IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

- Data dictionary:**

Entity	Attribute	Description	Data type	Length	Required	Multi-value	Default value	Primary key
admin	admin_id	Admin identifier	int	11	Yes			Yes
	firstname	The admin's first name	varchar	100	Yes			
	lastname	The admin's last name	varchar	100	Yes			
	username	The admin username	varchar	100	Yes			
	password	The admin password	varchar	100	Yes			
coffee_shop	coffee_id	Coffee shop identifier	int	11	Yes			Yes
	name	The coffee shop name	varchar	100	Yes			
	image	The coffee shop image	text		Yes			
	address	The coffee shop address	varchar	200	Yes			
	type	The coffee shop type	varchar	20	Yes		1	
	allow_notify	Determine if notifying the users of the newly added coffee shop	int	11	Yes		newOpen	
reviews	review_id	Review identifier	int	11	Yes			Yes
	username	Reviewer username	varchar	100	Yes			
	review	A review of a coffee shop	text		Yes			
	review_date	The review dates	date		Yes			

IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

• ER Diagram:



IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

4.4 Component Design

Component design is the definition and design of components and modules after the architectural design phase. Component-level design defines the data structures, algorithms, interface characteristics, and communication mechanisms allocated to each component for the system development. This section includes details of major system functionalities: add, search and post review.

Sprint number	PBI (user story)	User story tasks with effort estimates in hours			Sum effort
2	As an admin I want to be able to add coffee shops so that users can view and review coffee shops	Define ADD form style and make and create a table in the database for coffee shop information (2 hours)	Develop HTML, JavaScript and php code And validate it (5 hours)	Run performance tests on the ADD function (2 hours)	9hours
2	As a user I want to search about specific category of coffee shops so I can see a list of coffee shops matching my search in easy way.	Define the categories and their style then Develop HTML code to Create tables for the categories, (3 hours)	Develop php code that retrieve each category coffee shops from the database validate it (6 hours)	Run performance tests on the system if all the coffee shops in the data base are visible to the user (2 hours)	11hours
2	As a user I want to post review so I can share my experience about the coffee shop.	Develop HTML code to Create user form that asks for the name and the review of the users save the login data to DB” (2)	Develop php code that takes the input from the user then validate then inputs then save the inputs in the reviews database (7 hours)	Run performance tests on the system to see if the revies were save in the database and if they are visible to other users (2 hours)	11hours

IT 320 Course Project
Semester-2, 1443H (Spring 2022)

1- Add a coffee shop to one of the categories

Classification: Function

Definition: The admin will be able to add a coffee shop to base on its category.

Constraints:

Pre-condition: The admin is logged in

Post-condition: The system adds the coffee shop to the right category in` the user's and admin's home page.

Pseudocode:

1. BEGIN

2. DISPLAY coffee shops categories on the admin's home page

3. The user selects a category AND click on NEW

4. DISPLAY the ADD form

5. READ coffee shop category, coffee shop name, address, coffee shop photo, AND check notification

6. IF one or more of the information is empty **THEN**

7. The admin will fill all the fields

8.IF coffee shop category == indoor AND the admin clicks add new **THEN**

9.ADD the coffee shop to indoor category

10.ELSE IF coffee shop category == outdoor AND the admin clicks add new **THEN**

11. ADD the coffee shop to outdoor category

12.ELSE coffee shop category == new open AND check notification

==1 AND the admin clicks add new **THEN**

13.ADD the coffee shop to newly open category AND notify the user

14.END IF

15.ENDIF

16.END

IT 320 Course Project
Semester-2, 1443H (Spring 2022)

2- search about specific category of coffee shops

Classification: Function

Definition: The user will be able to search about specific category of coffee shops.

Pre-condition: The admin added coffee shops to the categories list.

Post-condition: The system displays the coffee shop information and reviews.

Pseudocode:

1. BEGIN

2. DISPLAY coffee shops categories on the user's home page

3. The user selects a category

4. DISPLAY coffee shops information (coffee shop name, reviews about the coffee shop, image of the coffee shop, description of the coffee shop).

5. END

3- post review about coffee shop in specific category

Classification: Function

Definition: The user will be able to post reviews about a coffee shop.

Pre-condition: The admin added coffee shops to the categories list.

Post-condition: The system displays the user review under the coffee shop.

Pseudocode:

1. BEGIN

2. DISPLAY coffee shops categories on the user's home page

3. The user selects a category and coffee shop in that category

4. READ user's name, user's review.

5. IF the user clicks on post review, **THEN**

6. ADD the review to the review list under the coffee shop.

7. DISPLAY the review and unable other users to view it.

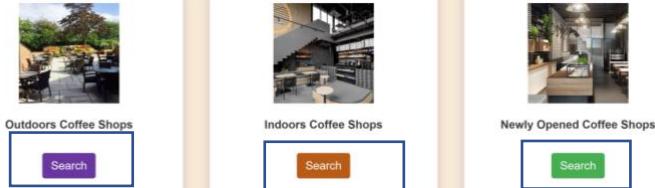
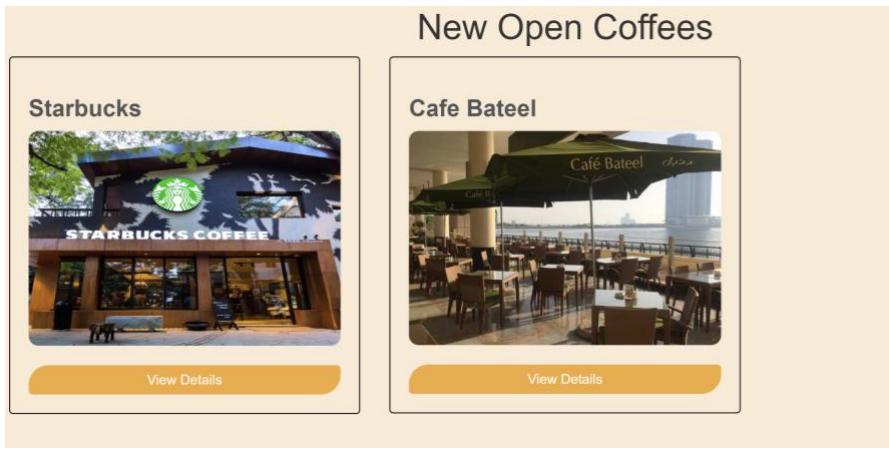
8. END

IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

4.5 Interface Design

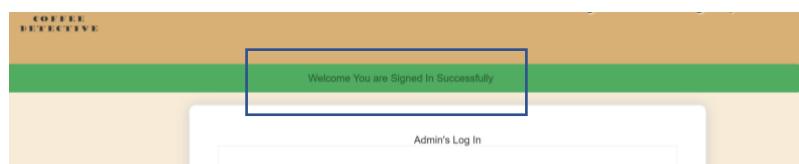
Interface design is the visual part of a computer application through which a client interacts with a computer or software. It determines how commands are given to the computer or the program and how data is displayed on the screen. In this section we will list UX guidelines we incorporated while designing the interface, navigation diagram for both admin and user and descriptive information for each field that appears on the screen.

UX guidelines:

UX guidelines			
1- Accessibility: When designing our website, we made sure to keep things simple and easy to use so that they can be used by as many people as possible.	 <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Outdoors Coffee Shops</p> <input type="button" value="Search"/> </div> <div style="text-align: center;">  <p>Indoors Coffee Shops</p> <input type="button" value="Search"/> </div> <div style="text-align: center;">  <p>Newly Opened Coffee Shops</p> <input type="button" value="Search"/> </div> </div>		
2- Consistency: making elements in our website uniform, having them look and behave the same way.	 <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Starbucks</p>  <input type="button" value="View Details"/> </div> <div style="text-align: center;"> <p>Cafe Bateel</p>  <input type="button" value="View Details"/> </div> </div>		
3-Customisability: is the modifiability of the user interface by user(adaptability), like in our system the user can modify his interface to light or dark mode.	 <div style="display: flex; align-items: center;"> en <input type="checkbox"/> Sign-Out  </div> <div style="margin-top: 20px;"> <div style="background-color: black; color: white; padding: 5px; display: flex; align-items: center;"> <input type="checkbox"/> Sign-Out  </div> </div>		

IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

4-Offer informative feedback: for user actions there should be some system feedback, such as when user signed in successfully, delete, update...etc. there will be a feedback message to the user.



5-Offer error prevention and simple error handling: designing the system so the user cannot make a serious error, and if an error is made the system should be able to detect that error, like in form the user what to write in a form and validating user input.

A screenshot of a web application interface titled "Fill Admin's information". It contains three input fields: "Admin's First name", "Admin's Last name", and "Password". Each field has a validation error message below it:

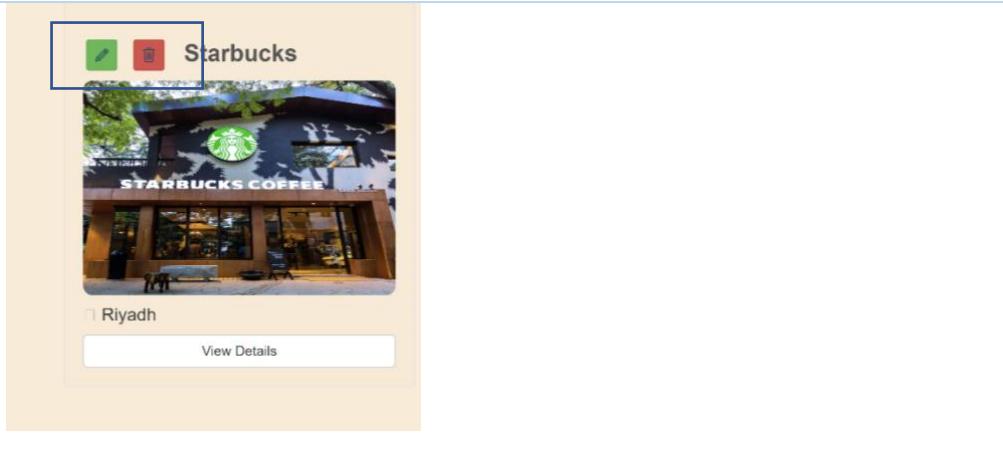
- "Admin's First name": "Please match the requested format. Letters Only"
- "Admin's Last name": "Please match the requested format. Letters Only"
- "Password": "Please match the requested format. enter 3-15 digits Only"

Below the password field is a "Sign Up" button.

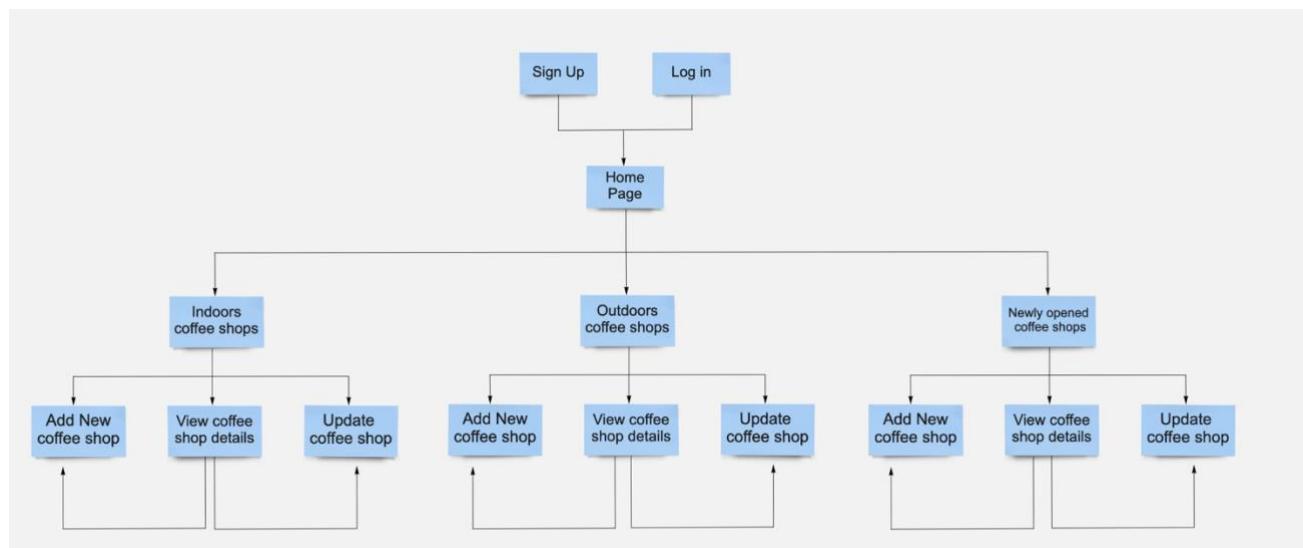
IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

6-Recognition:

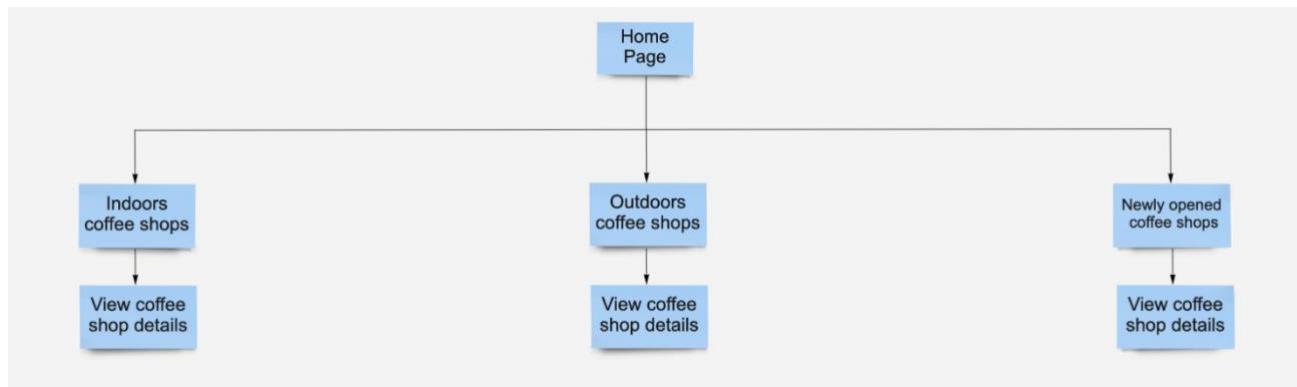
Showing users elements they can recognize improves usability. Using icons familiar to the user so he/she can recognize it, like delete and update icons.



Admin navigation diagram:

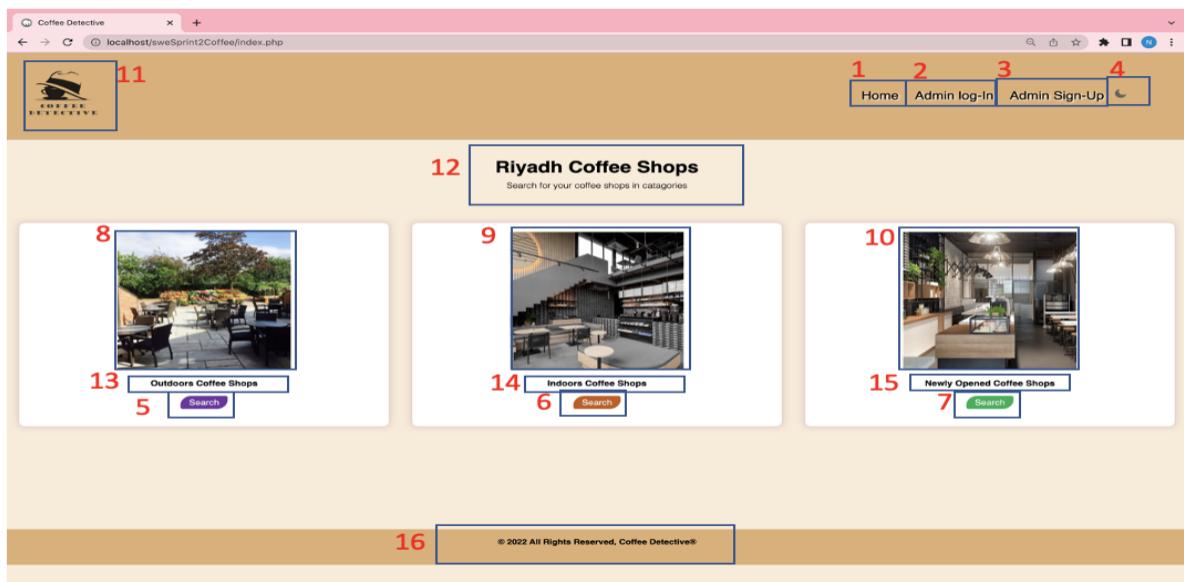


IT 320 Course Project
Semester-2, 1443H (Spring 2022)
User navigation diagram:



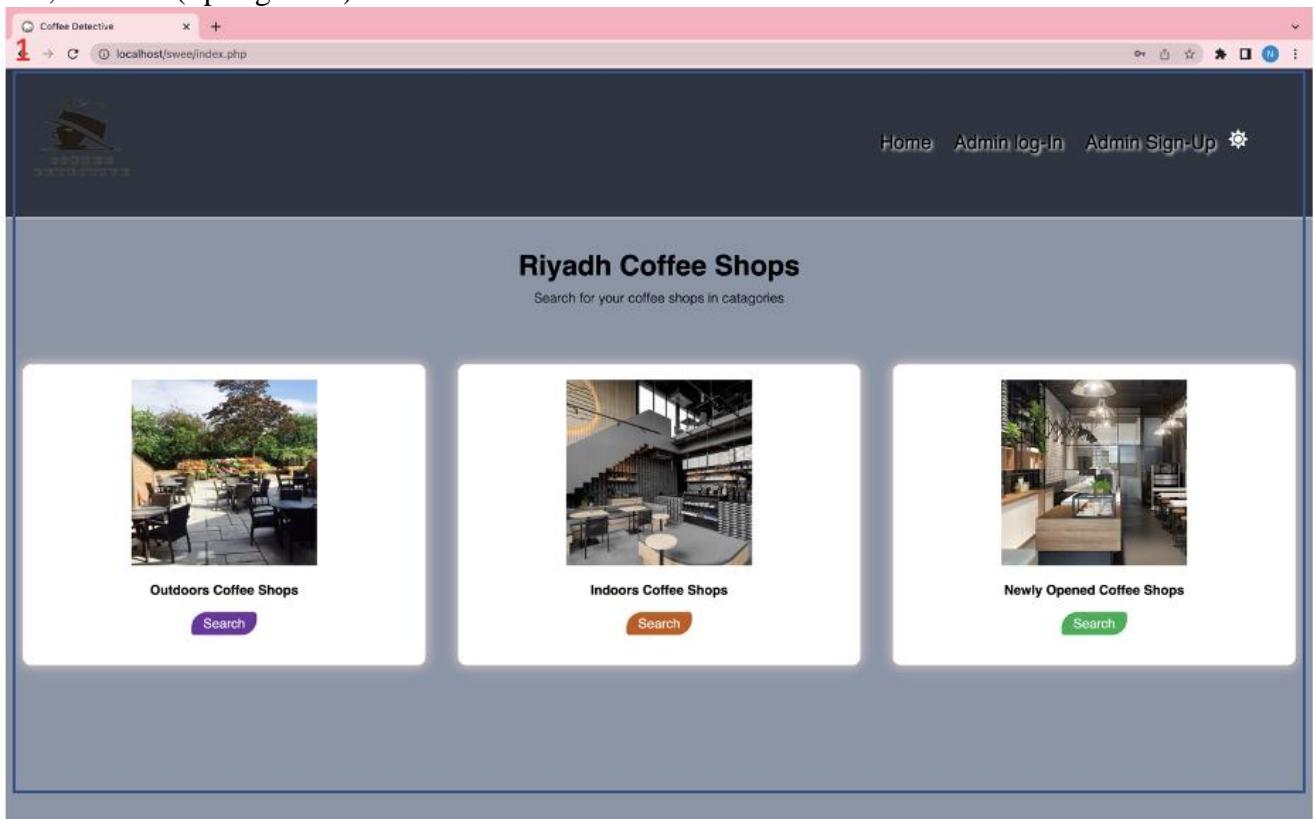
Interface design

1-User



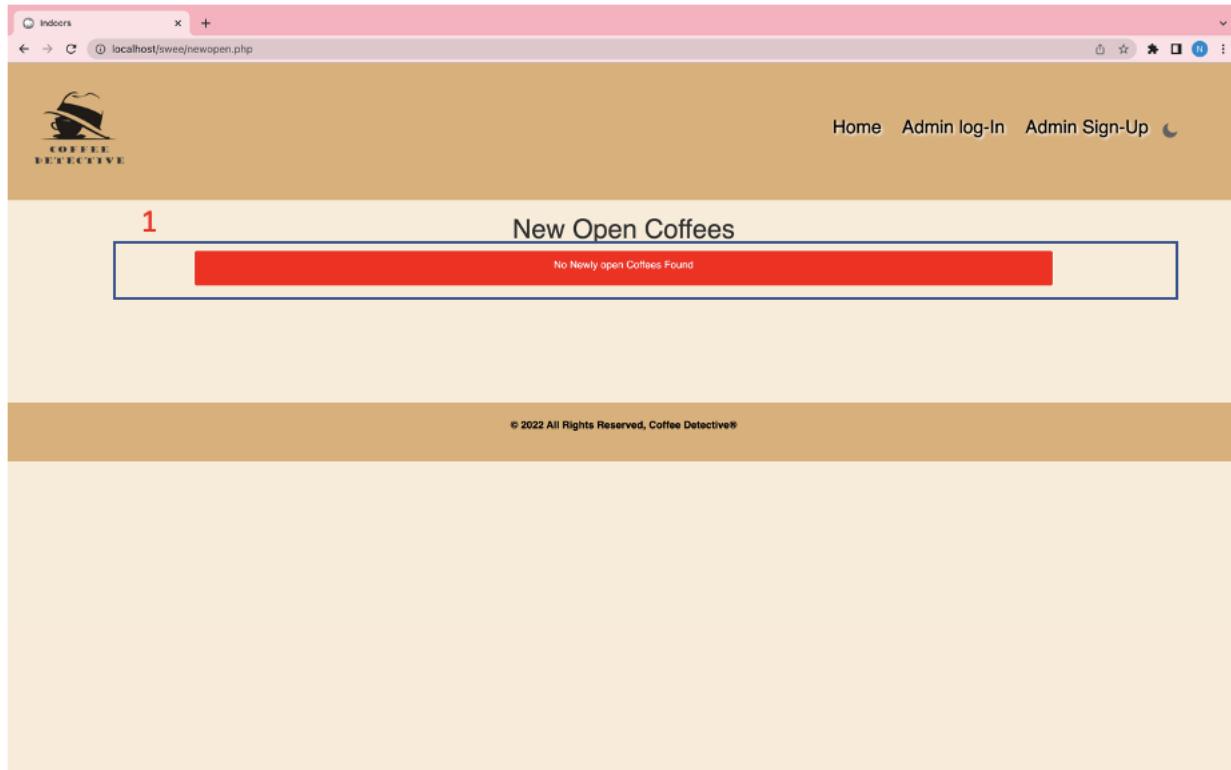
#	Description
1	Button transfer to user home page
2	Button transfer to admin log in page
3	Button transfer to admin sign up page
4	Button to switch from dark/light mood
5	Search Button for outdoor category to view outdoor coffee shops
6	Search Button for indoor category to view indoor coffee shops
7	Search Button for Newly opened category to view Newly opened coffee shops
8	Image for the outdoor coffee shops category
9	Image for the indoor coffee shops category
10	Image for the Newly opened coffee shops category
11	Image for the logo of the website
12	Text field for the title of the user home page
13	Text field for title of outdoor coffee shops category
14	Text field for title of indoor coffee shops category
15	Text field for title of Newly opened coffee shops category
16	Text field of footer copy right of the website

IT 320 Course Project
Semester-2, 1443H (Spring 2022)



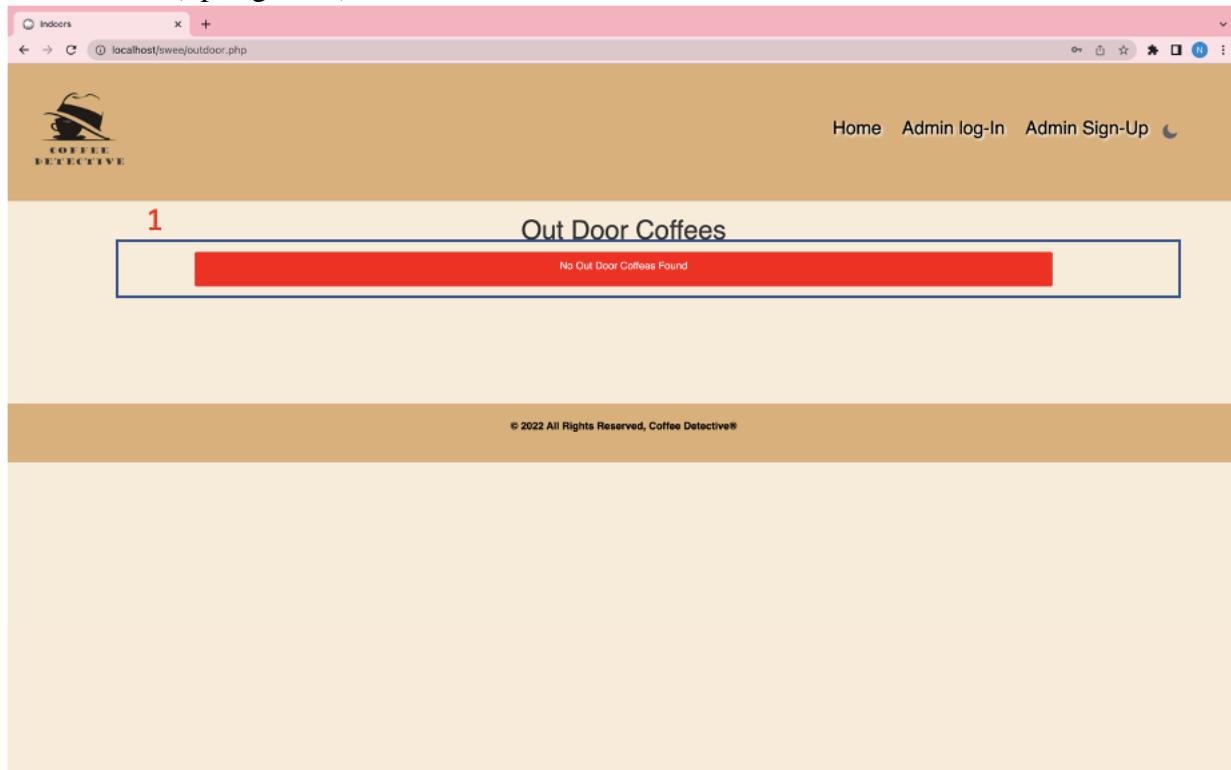
#	Description
1	System response to Dark mood for user home page

IT 320 Course Project
Semester-2, 1443H (Spring 2022)



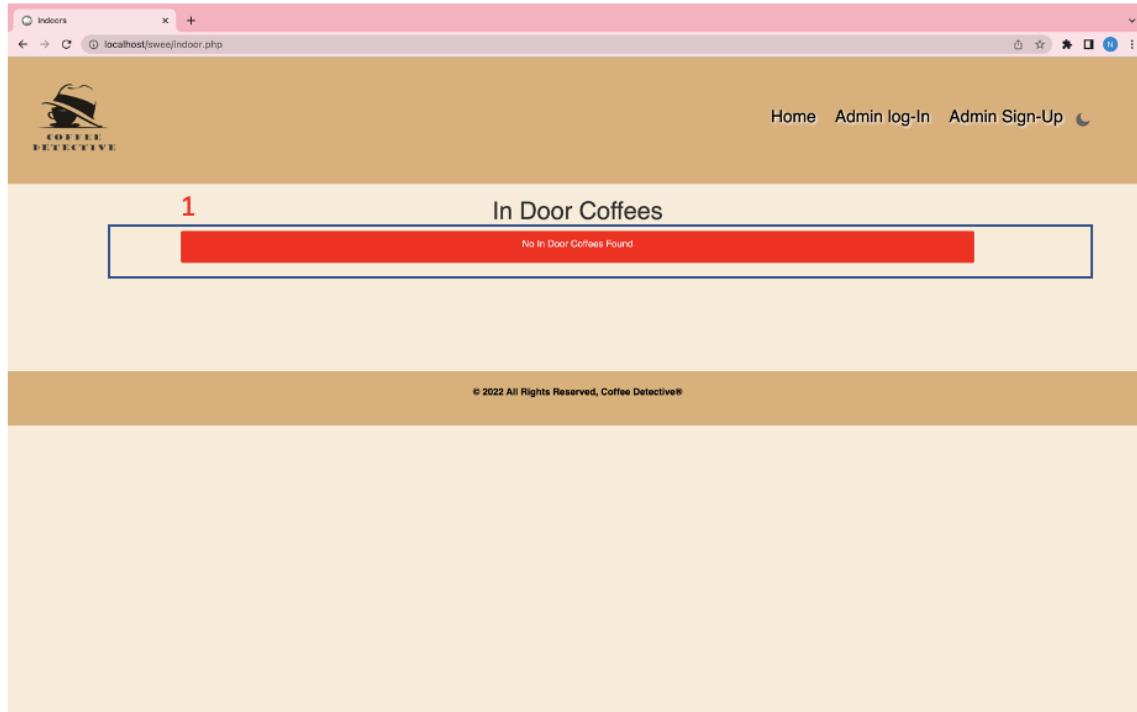
#	Description
1	System feedback response in Newly opened coffee shops category user page when no Newly opened coffee shop found

IT 320 Course Project
Semester-2, 1443H (Spring 2022)



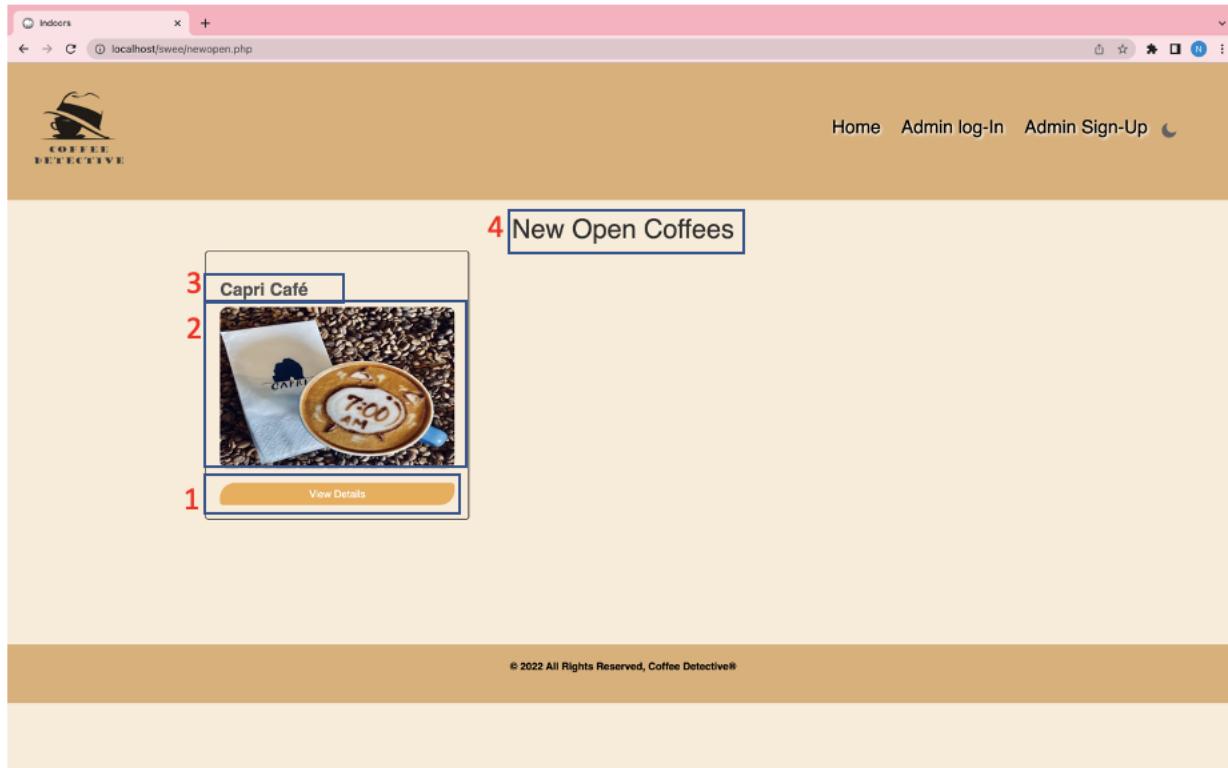
#	Description
1	System feedback response in outdoor coffee shops category user page when no outdoor coffee shop found

IT 320 Course Project
Semester-2, 1443H (Spring 2022)



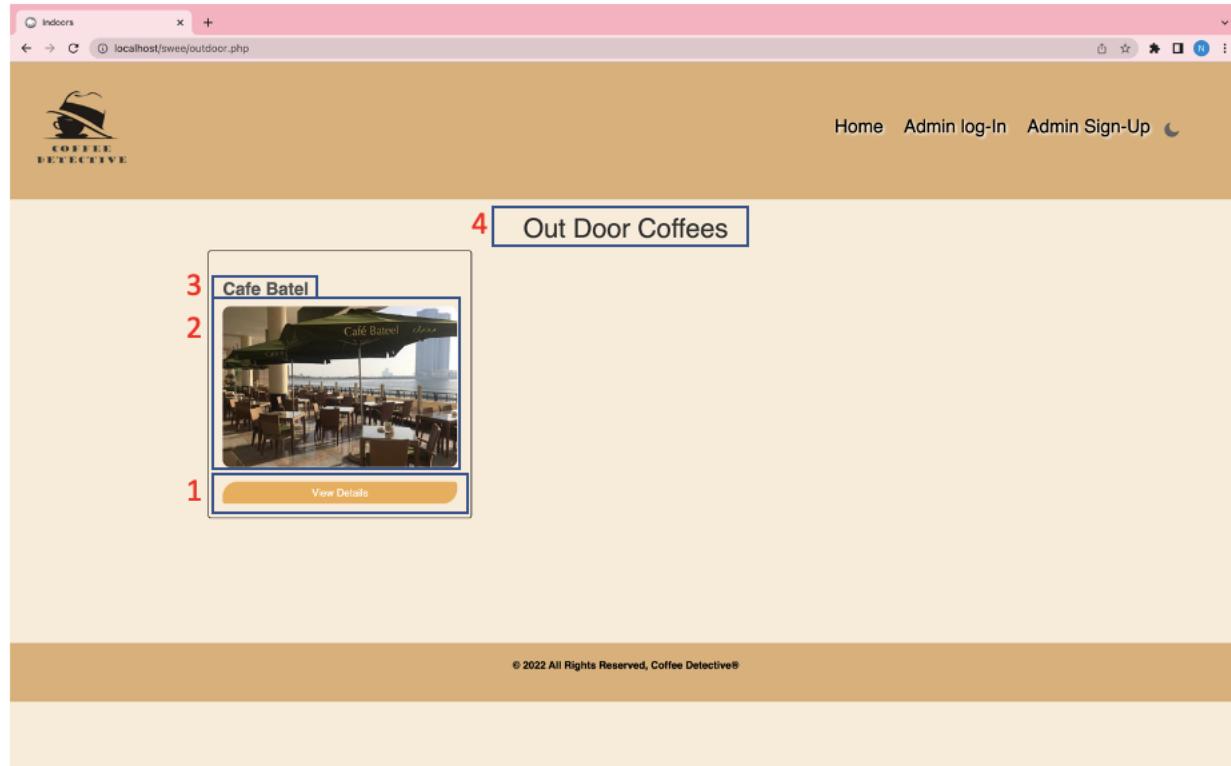
#	Description
1	System feedback response in indoor coffee shops category user page when no indoor coffee shop found

IT 320 Course Project
 Semester-2, 1443H (Spring 2022)



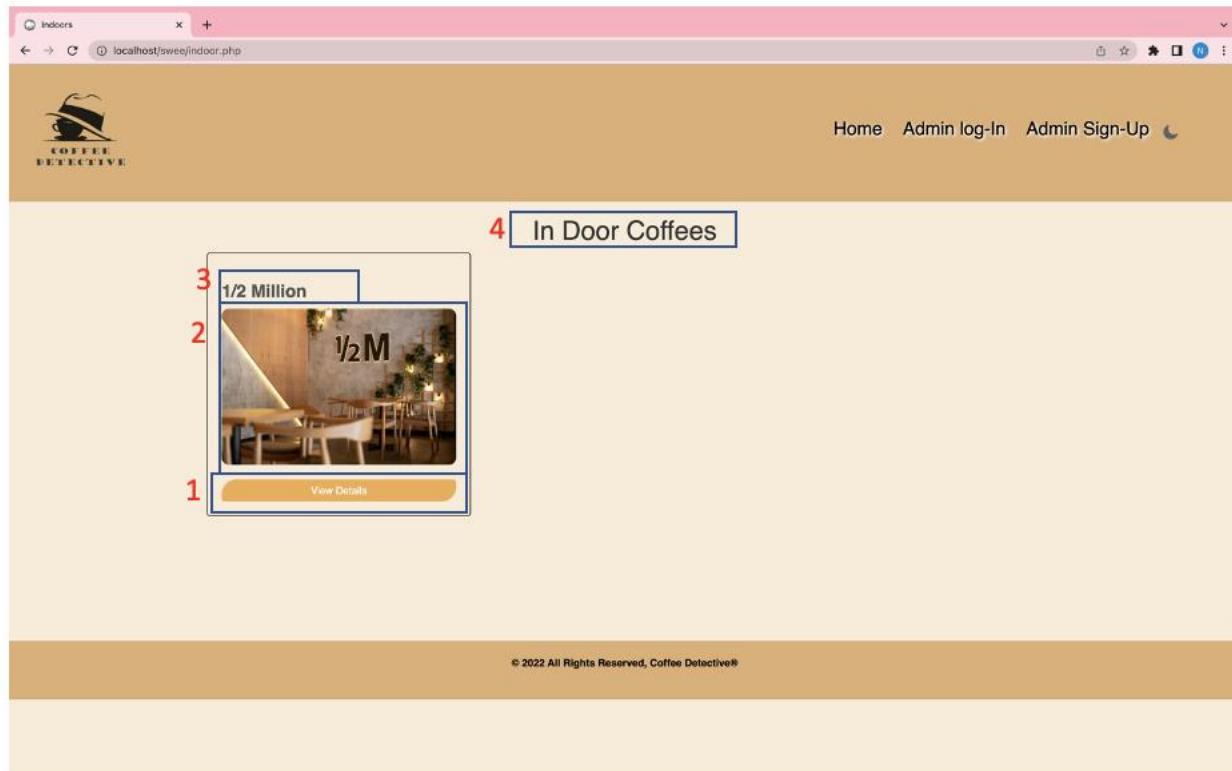
#	Description
1	Button transfer the user to page that contains the specific newly opened coffee shop reviews details
2	image of the specific coffee shop
3	Text field of the name of coffee shop
4	Text field of the title of the category

IT 320 Course Project
Semester-2, 1443H (Spring 2022)



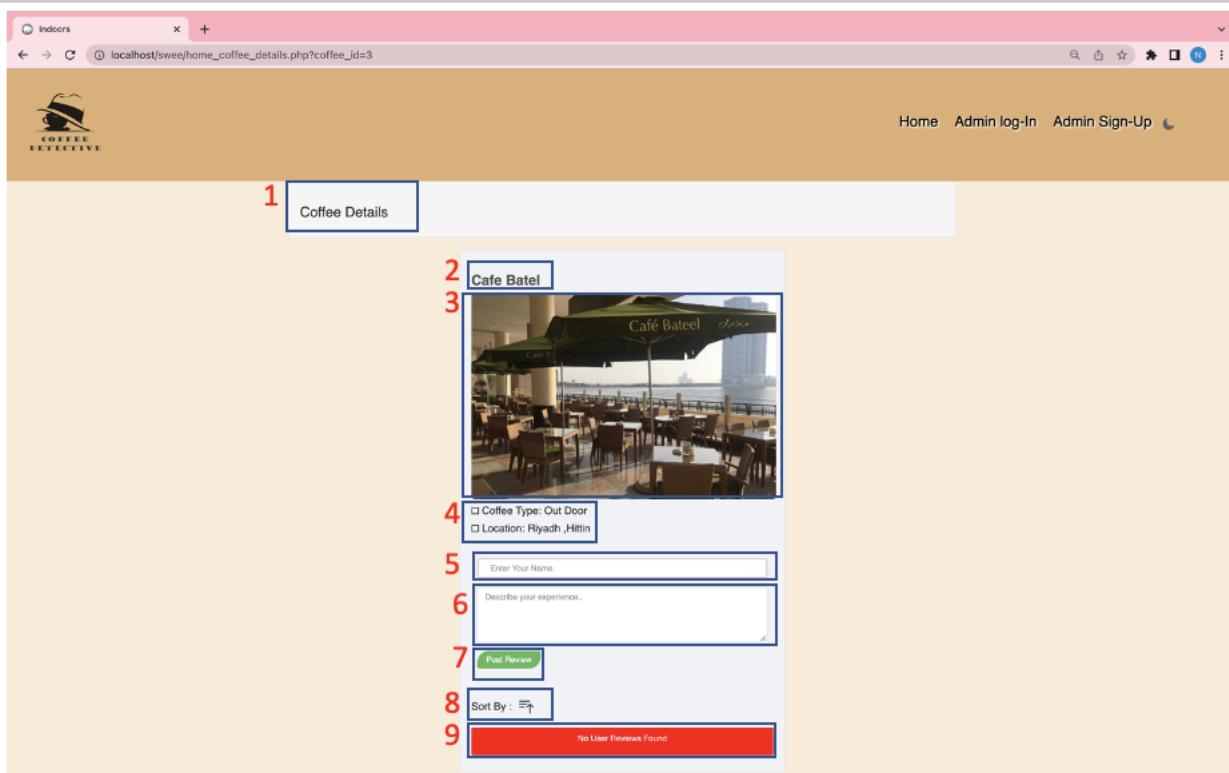
#	Description
1	Button transfer the user to page that contains the specific outdoor coffee shop reviews details
2	image of the specific coffee shop
3	Text field of the name of coffee shop
4	Text field of the title of the category

IT 320 Course Project
Semester-2, 1443H (Spring 2022)



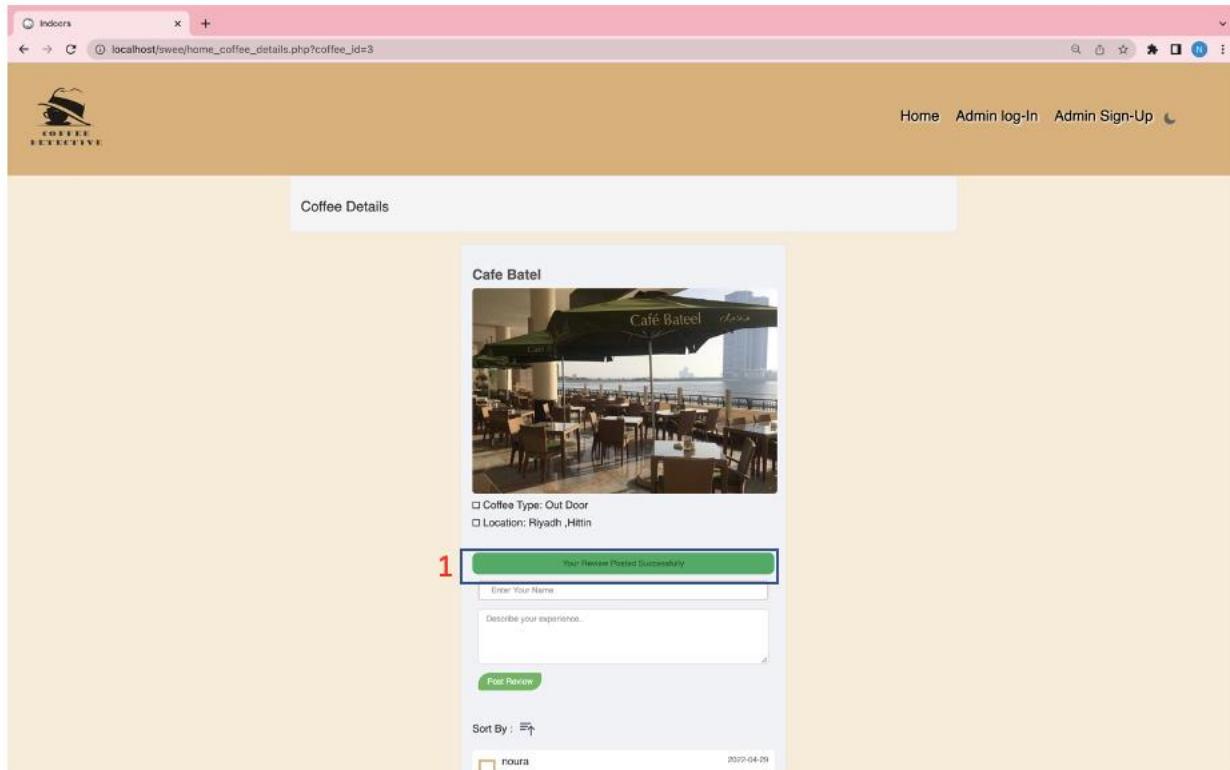
#	Description
1	Button transfer the user to page that contains the specific indoor coffee shop reviews details
2	image of the specific coffee shop
3	Text field of the name of coffee shop
4	Text field of the title of the category

IT 320 Course Project
 Semester-2, 1443H (Spring 2022)



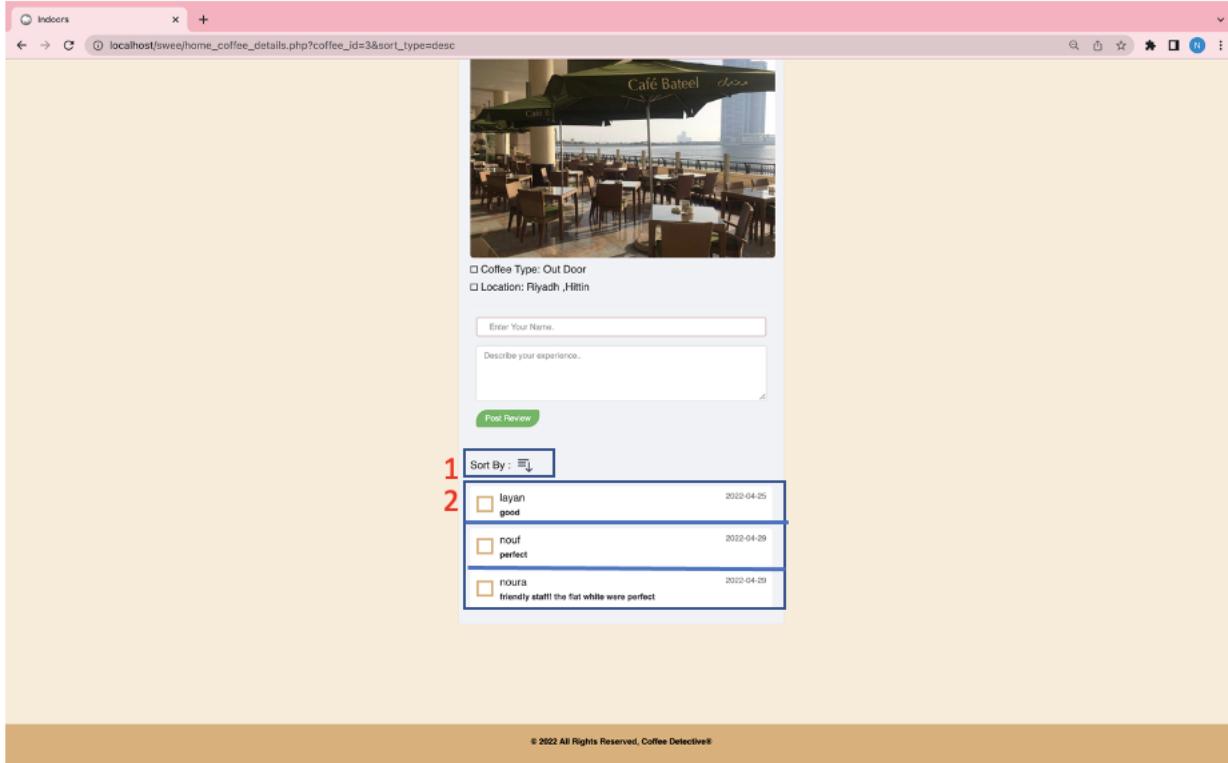
#	Description
1	Text field of the title of user view details page
2	Text field of the name for specific coffee shop
3	image for the specific coffee shop
4	Text field for information about the coffee shop
5	Text field to the name of the user
6	Text field to write the review of the user
7	Button to post the review
8	Button to sort the reviews based on the date of the review posted
9	System response that is no user review posted

IT 320 Course Project
Semester-2, 1443H (Spring 2022)



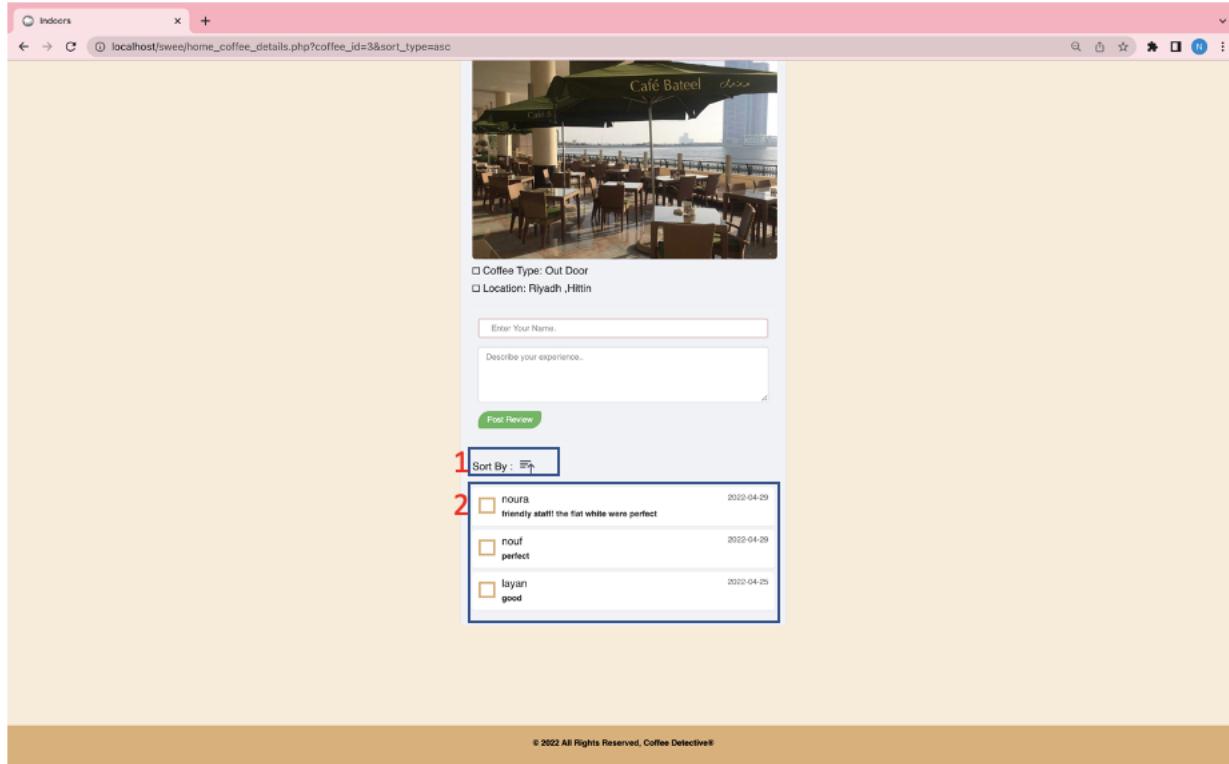
#	Description
1	System feedback response when user review was posted successfully

IT 320 Course Project
Semester-2, 1443H (Spring 2022)



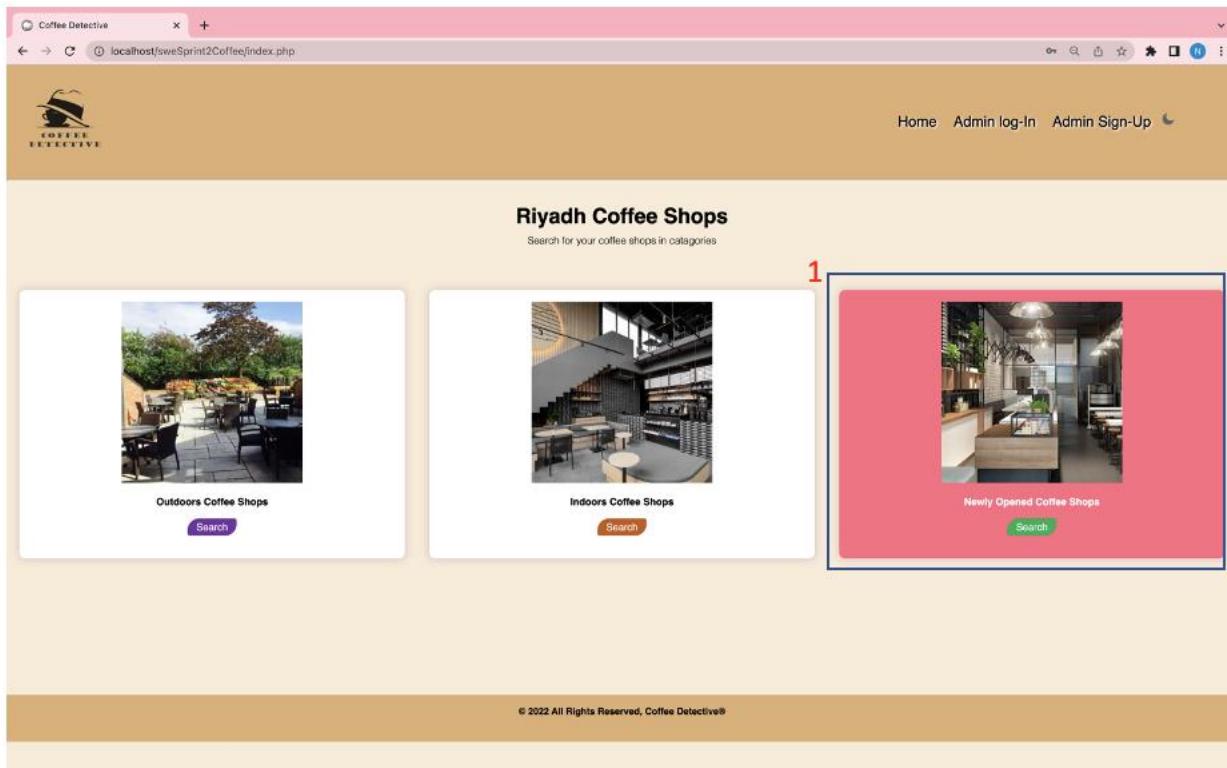
#	Description
1	Button to sort the reviews based on posted date
2	Text field for reviews information details

IT 320 Course Project
Semester-2, 1443H (Spring 2022)



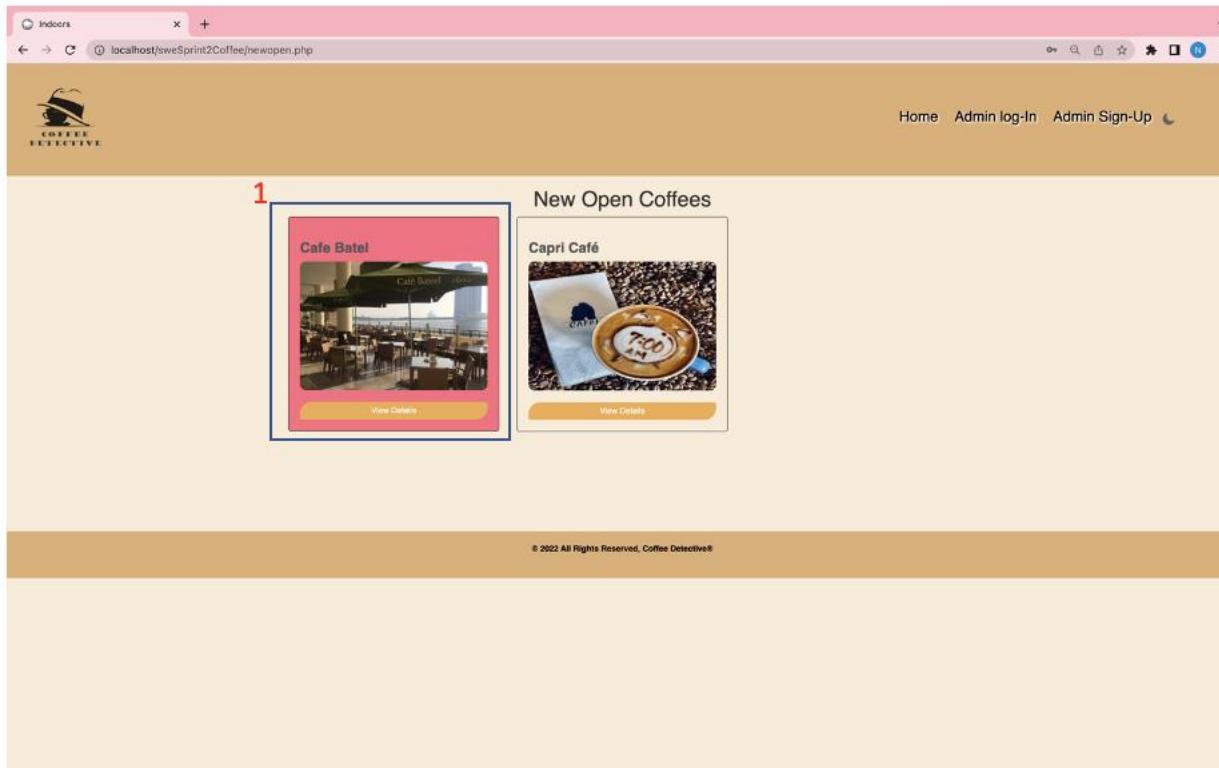
#	Description
1	Button to sort the reviews based on posted date
2	System response to the <u>sort</u> button and sorted based on the newest reviews

IT 320 Course Project
Semester-2, 1443H (Spring 2022)



#	Description
1	System response to notifying the user in the user home page that there is a new open coffee shop has been added

IT 320 Course Project
Semester-2, 1443H (Spring 2022)



#	Description
1	System response to notifying the user of the specific opened coffee shop that has been added in the newly open coffee shop category

IT 320 Course Project
Semester-2, 1443H (Spring 2022)

2-Admin

The screenshot shows a web browser window titled "Admin sign-in" with the URL "localhost/sweSprint2Coffee/Admin%20sign%20up.php". The page has a header with the "COFFEE DETECTIVE" logo and navigation links for "Home", "Admin log-In", and "Admin Sign-Up". The main content is a form titled "Fill Admin's information" with the following fields:

- Admin's First name: (Input field, labeled 2)
- Admin's Last name: (Input field, labeled 3)
- Admin's Username: (Input field, labeled 4)
- Password: (Input field, labeled 5)
- Sign Up: (Submit button, labeled 6)

At the bottom of the page, there is a footer with the text "© 2022 All Rights Reserved, Coffee Detective®".

#	Description
1	Text field of the title for the form for the admin sign up information
2	Input field for admin first name
3	Input field for admin last name
4	Input field for admin username
5	Input field for password for the admin
6	Button for sign up the admin

IT 320 Course Project
Semester-2, 1443H (Spring 2022)

The screenshot shows a web browser window with the URL `localhost/sweSprint2Coffee/Admin%20sign%20up.php`. The page title is "Admin sign-in". On the left, there's a logo for "COFFEE DETECTIVE". The main content area has a light orange background and contains a form titled "Fill Admin's information". The form fields are:

- Admin's First name: A red-bordered input field containing "777". A tooltip error message says "Please match the requested format. Letters Only".
- Admin's Last name: An input field with placeholder text "Enter your Last Name".
- Admin's Username: An input field with placeholder text "Enter your Username".
- Password: An input field with placeholder text "enter 8-15 digits Only".

At the bottom of the form is a "Sign Up" button. At the very bottom of the page, there's a footer bar with the text "© 2022 All Rights Reserved, Coffee Detective®".

#	Description
1	System feedback response to warn the admin about the right input for first name

IT 320 Course Project
Semester-2, 1443H (Spring 2022)

The screenshot shows a web browser window titled "Admin sign-in" with the URL "localhost/sweSprint2Coffee/Admin%20sign%20up.php". The page has a header with the "COFFEE DETECTIVE" logo and navigation links for "Home", "Admin log-In", and "Admin Sign-Up". The main content area is titled "Fill Admin's information" and contains four input fields:

- Admin's First name:
- Admin's Last name: (This field is highlighted with a red border and has an error message)
- Admin's Username:
- Password:

A blue button labeled "Sign Up" is at the bottom. An error message box is overlaid on the "Last name" field, stating: "1 Please match the requested format. Letters Only".

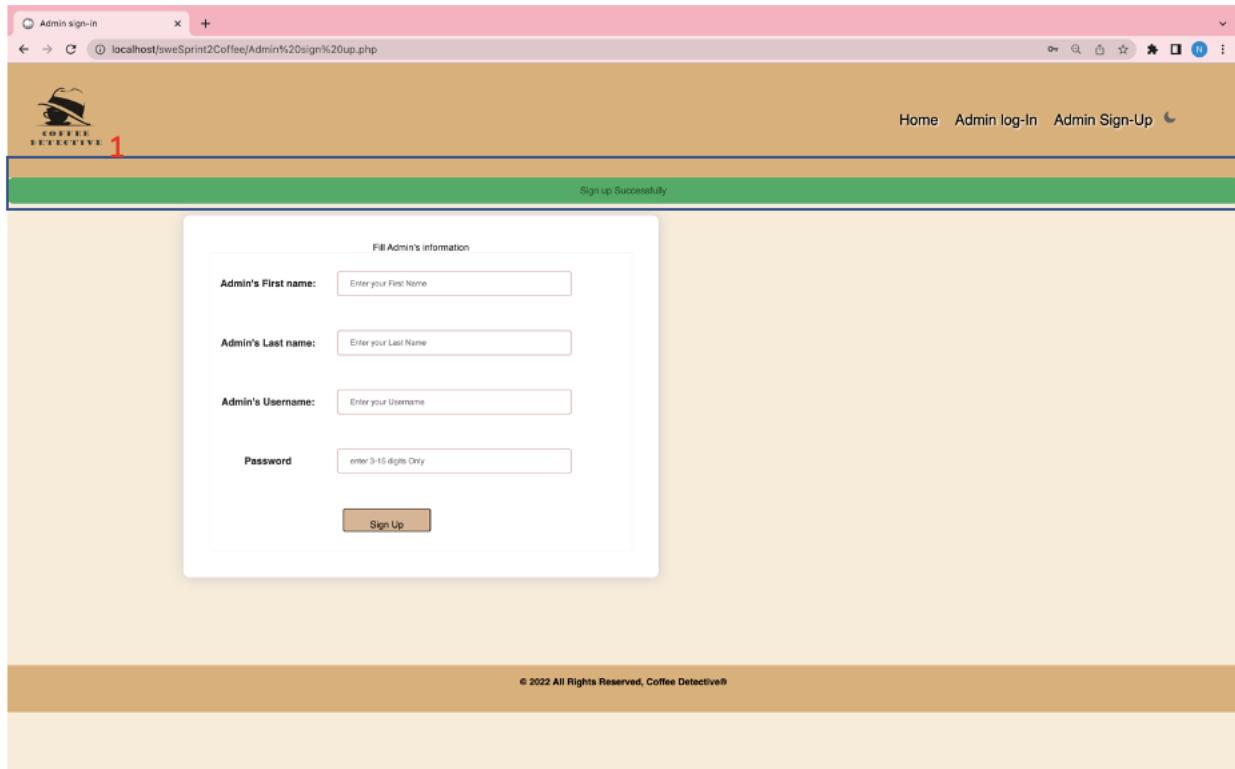
#	Description
1	System feedback response to warn the admin about the right input for last name

IT 320 Course Project
Semester-2, 1443H (Spring 2022)

The screenshot shows a web browser window with the URL `localhost/sweSprint2Coffee/Admin%20sign%20up.php`. The page title is "Admin sign-in". The main content is a form titled "Fill Admin's information". It contains four text input fields: "Admin's First name" (value: manal), "Admin's Last name" (value: alhamdan), "Admin's Username" (value: manal), and a "Password" field. The "Password" field has a red border and a tooltip error message: "1 Please match the requested format. Enter 8-16 digits Only". Below the password field is a "Sign Up" button. At the bottom of the page, there is a copyright notice: "© 2022 All Rights Reserved, Coffee Detective®".

#	Description
1	System feedback response to warn the admin about the right input for password

IT 320 Course Project
Semester-2, 1443H (Spring 2022)



#	Description
1	System feedback response about the admin sign up successfully

IT 320 Course Project
Semester-2, 1443H (Spring 2022)

The screenshot shows a web browser window titled "Admin sign-in" with the URL "localhost/SweSprint2Coffee/Admin%20sign%20up.php". The page has a header with the "COFFEE DETECTIVE" logo and navigation links for "Home", "Admin log-In", and "Admin Sign-Up". A red horizontal bar at the top contains the text "The admin username is already found into database". Below this, there is a form titled "Fill Admin's information" with four input fields: "Admin's First name", "Admin's Last name", "Admin's Username", and "Password". Each field has a placeholder text: "Enter your First Name", "Enter your Last Name", "Enter your Username", and "enter 8-15 digits Only". A "Sign Up" button is located at the bottom of the form. At the very bottom of the page, there is a small copyright notice: "© 2022 All Rights Reserved, Coffee Detective®".

#	Description
1	System feedback response to warn that there is same username found

IT 320 Course Project
Semester-2, 1443H (Spring 2022)

The screenshot shows a web browser window with the title "Admin log-in". The address bar contains the URL "localhost/sweSprint2Coffee/Admin%20log%20in.php". The main content is a login form titled "Admin's Log In". It includes an input field for "Admin's Username" with the placeholder "Enter your Username" and an input field for "Password" with the placeholder "Password length must be 5-10 characters". Below the password field is a "Log In" button. The entire form is enclosed in a white box with rounded corners. Red numbers 1 through 4 are overlaid on the form fields and button to indicate specific elements for analysis.

#	Description
1	Text field of the title for the form for admin log in information
2	Input field for admin username
3	Input field for password of the admin username
4	Button to log in the admin

IT 320 Course Project
Semester-2, 1443H (Spring 2022)

Admin log-in

localhost/sweSprint2/Coffee/Admin%20log%20in.php

Coffee Detective

Home Admin log-In Admin Sign-Up

Invalid Login. Try Again.

Admin's Log In

Admin's Username: Enter your Username

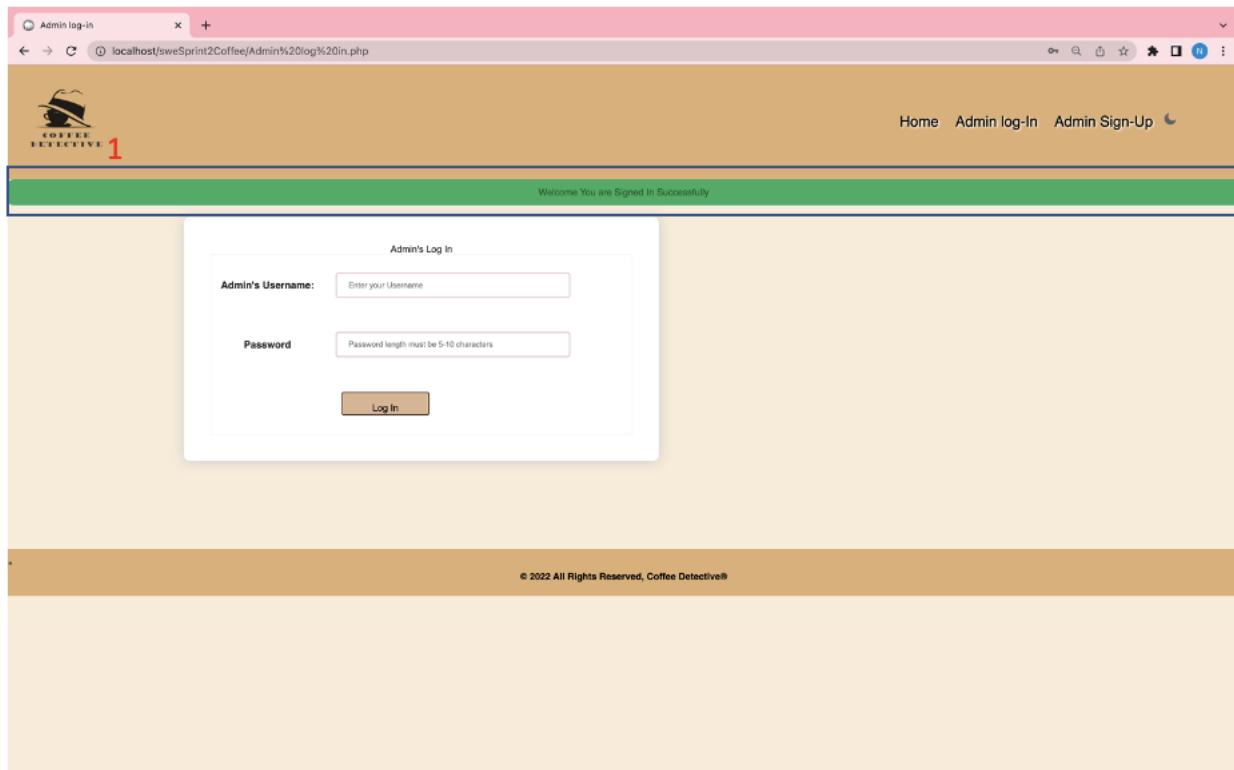
Password: Password length must be 5-10 characters

Log In

© 2022 All Rights Reserved, Coffee Detective®

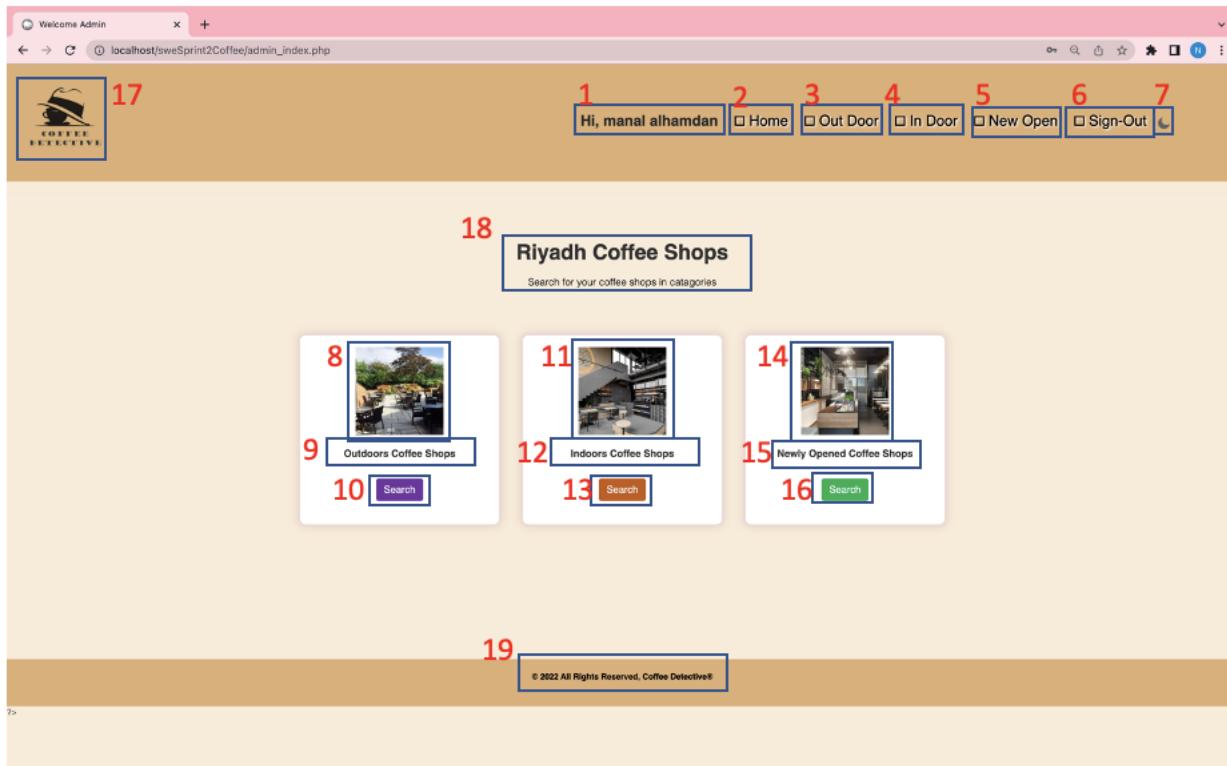
#	Description
1	System feedback response about the log in failed

IT 320 Course Project
Semester-2, 1443H (Spring 2022)



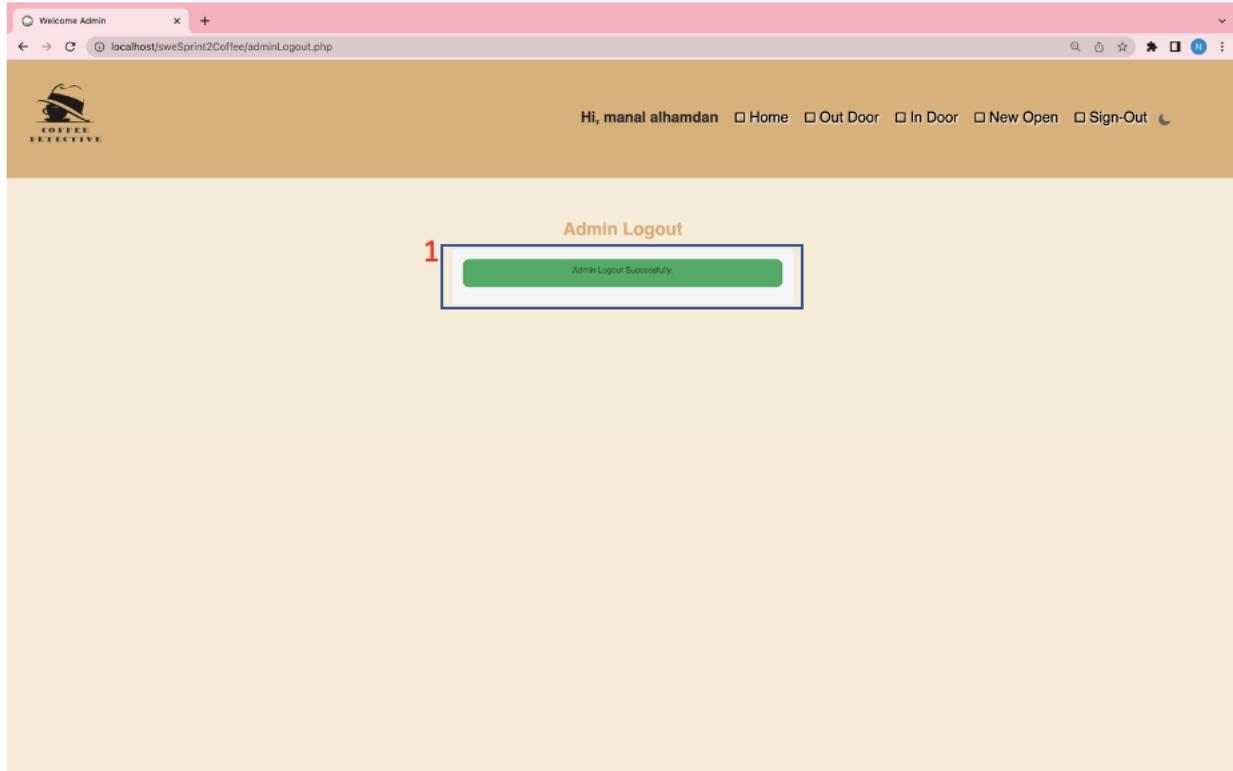
#	Description
1	System feedback response about the admin log in successfully

IT 320 Course Project
Semester-2, 1443H (Spring 2022)



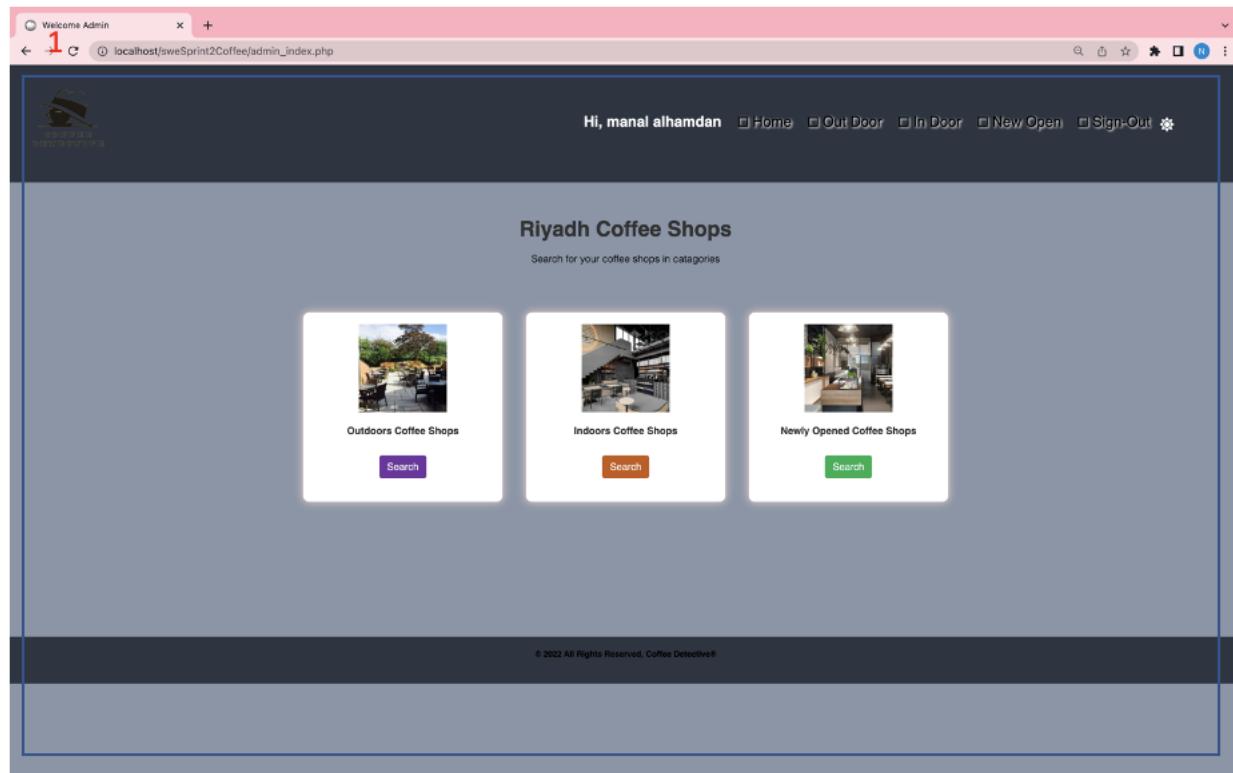
#	Description
1	Text field about admin first and last name
2	Button transfer to admin home page
3	Button transfer to admin outdoor coffee shops page
4	Button transfer to admin indoor coffee shops page
5	Button transfer to admin newly opened coffee shops page
6	Button to admin sign out
7	Button to switch from dark/light mood
8	Image for the outdoor coffee shops category
9	Text field for title of outdoor coffee shops category
10	Search Button for outdoor coffee shops category to view/add/delete outdoor coffee shops
11	Image for the indoor coffee shops category
12	Text field for title of indoor coffee shops category
13	Search Button for indoor coffee shops category to view/add/delete indoor coffee shops
14	Image for the Newly opened coffee shops category
15	Text field for title of Newly opened coffee shops category
16	Search Button for newly opened coffee shops category to view/add/delete outdoor coffee shops
17	Image for the logo of the website
18	Text field for the title of the admin home page
19	Text field of footer copy right of the website

IT 320 Course Project
Semester-2, 1443H (Spring 2022)



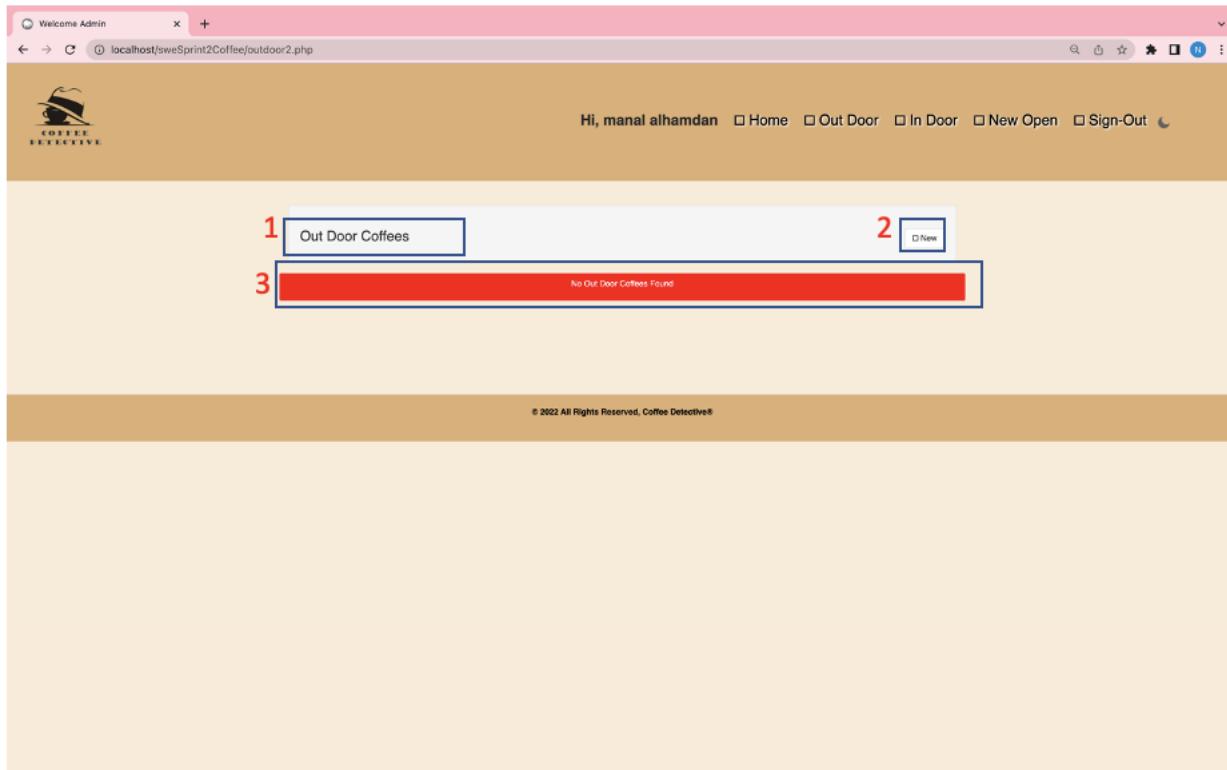
#	Description
1	System feedback response about the admin log out successfully

IT 320 Course Project
Semester-2, 1443H (Spring 2022)



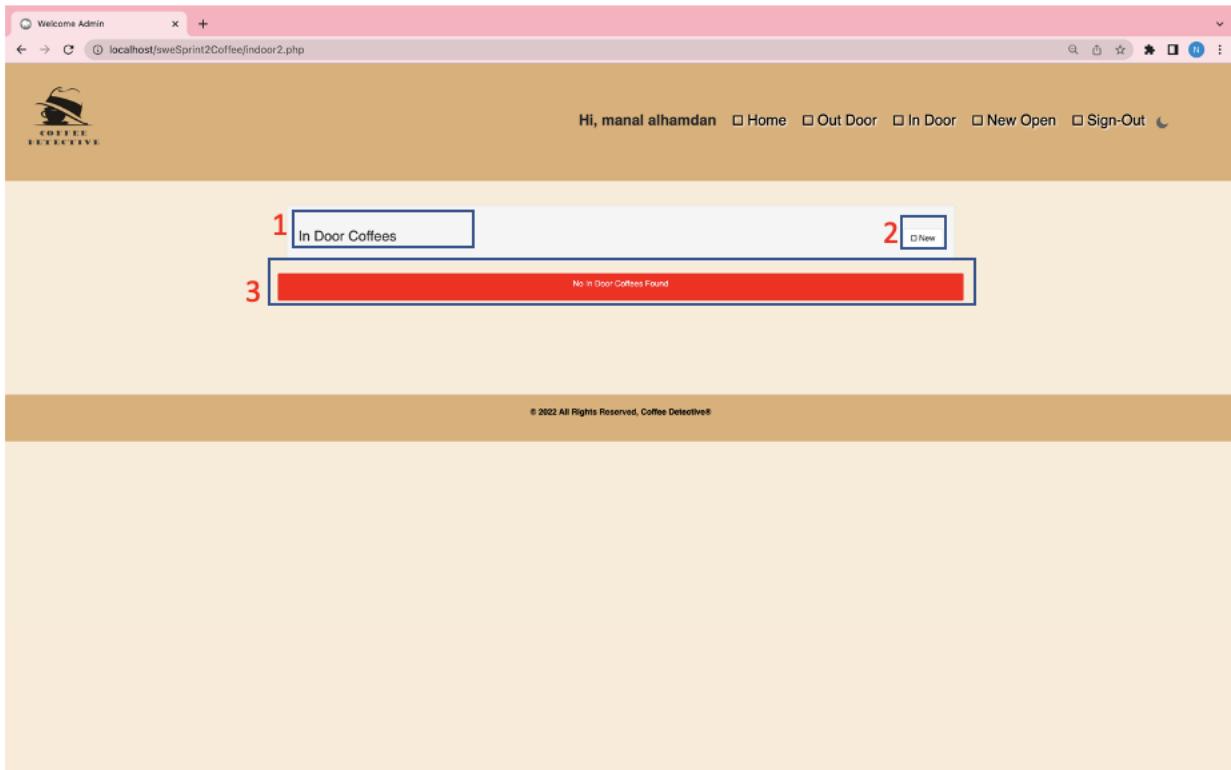
#	Description
1	System response to Dark mood for admin home page

IT 320 Course Project
Semester-2, 1443H (Spring 2022)



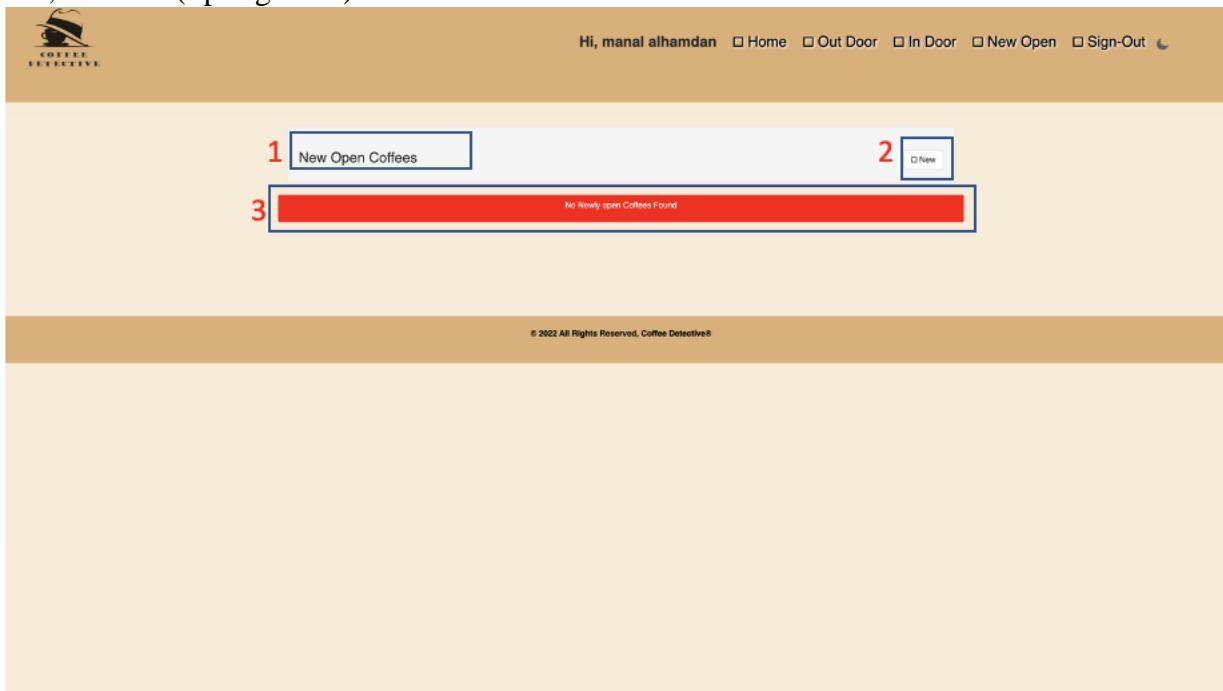
#	Description
1	Text field of the title for the outdoor coffee shops category
2	Button transfer the admin to add new coffee shop page
3	System feedback response in outdoor coffee shops category admin page when no coffee shops found

IT 320 Course Project
Semester-2, 1443H (Spring 2022)



#	Description
1	Text field of the title for the indoor coffee shops category
2	Button transfer the admin to add new coffee shop page
3	System feedback response in indoor coffee shops category admin page when no coffee shops found

IT 320 Course Project
Semester-2, 1443H (Spring 2022)



#	Description
1	Text field of the title for the outdoor coffee shops category
2	Button transfer the admin to add new coffee shop page
3	System feedback response in Newly opened coffee shops category admin page when no coffee shops found

IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

Hi, manal alhamdan Home Out Door In Door New Open Sign-Out

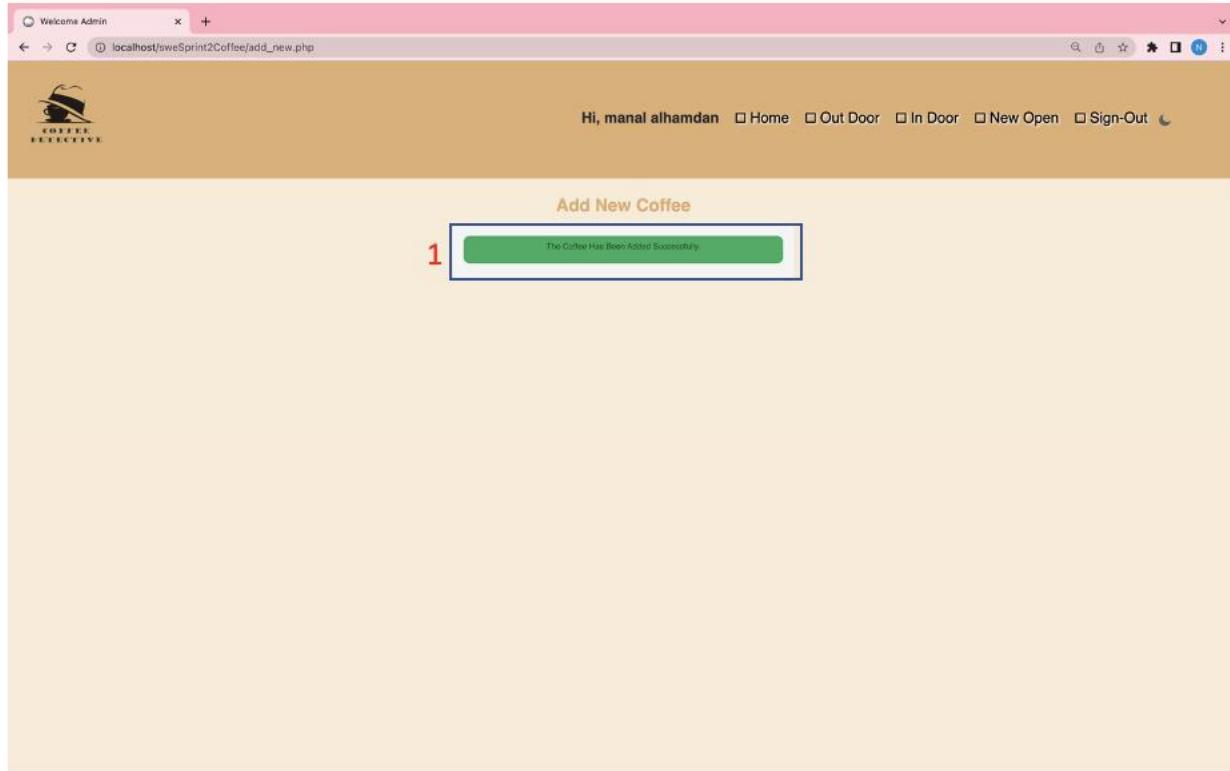
Add New Coffee

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8 Check here to notify the users
- 9
- 10
- 11

© 2022 All Rights Reserved, Coffee Detective®

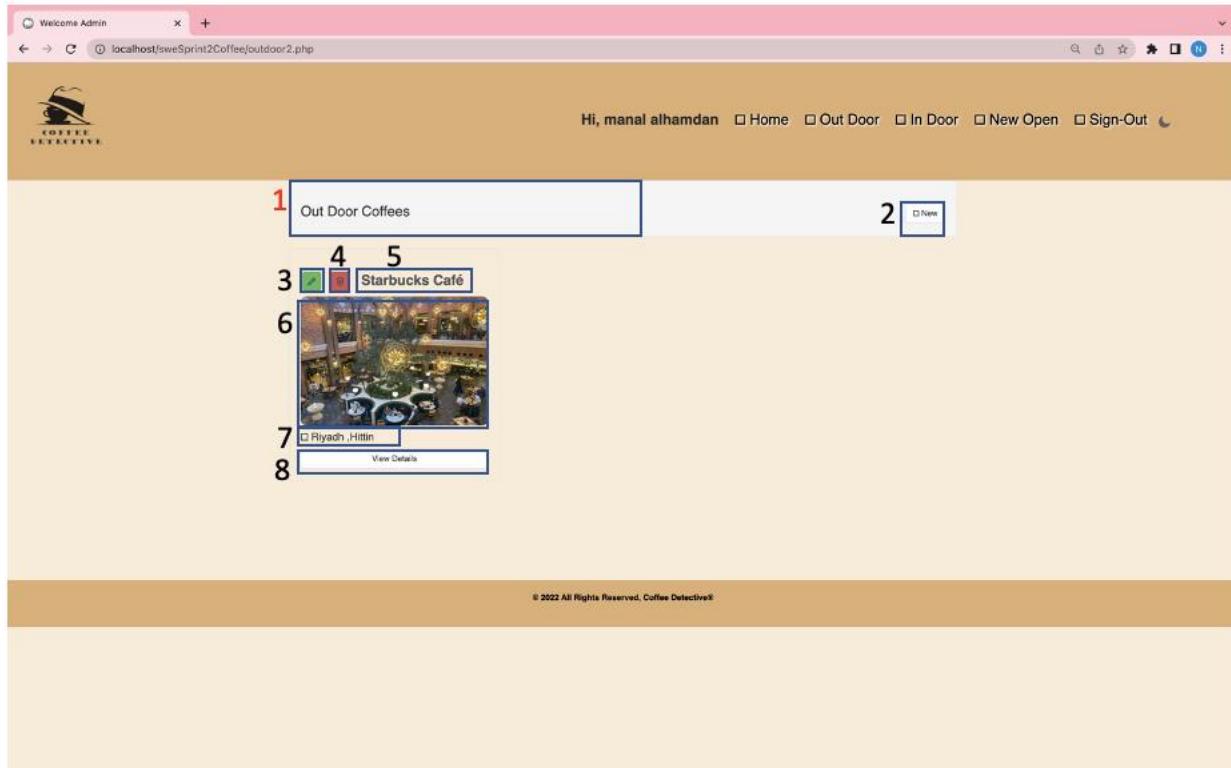
#	Description
1	Text field of the title of admin add coffee shop page
2	Text field for the coffee type
3	Drop down menu to select the category type of the added coffee shop
4	Text field for the coffee shop name
5	input field to write the name of the coffee shop
6	Text field for the coffee shop address
7	input field to write the address of the coffee shop
8	Check option to choose to notify the user about the coffee shop that has been added
9	Text field for the coffee shop photo
10	Button to upload image for the coffee shop
11	Button to add the new coffee shop

IT 320 Course Project
Semester-2, 1443H (Spring 2022)



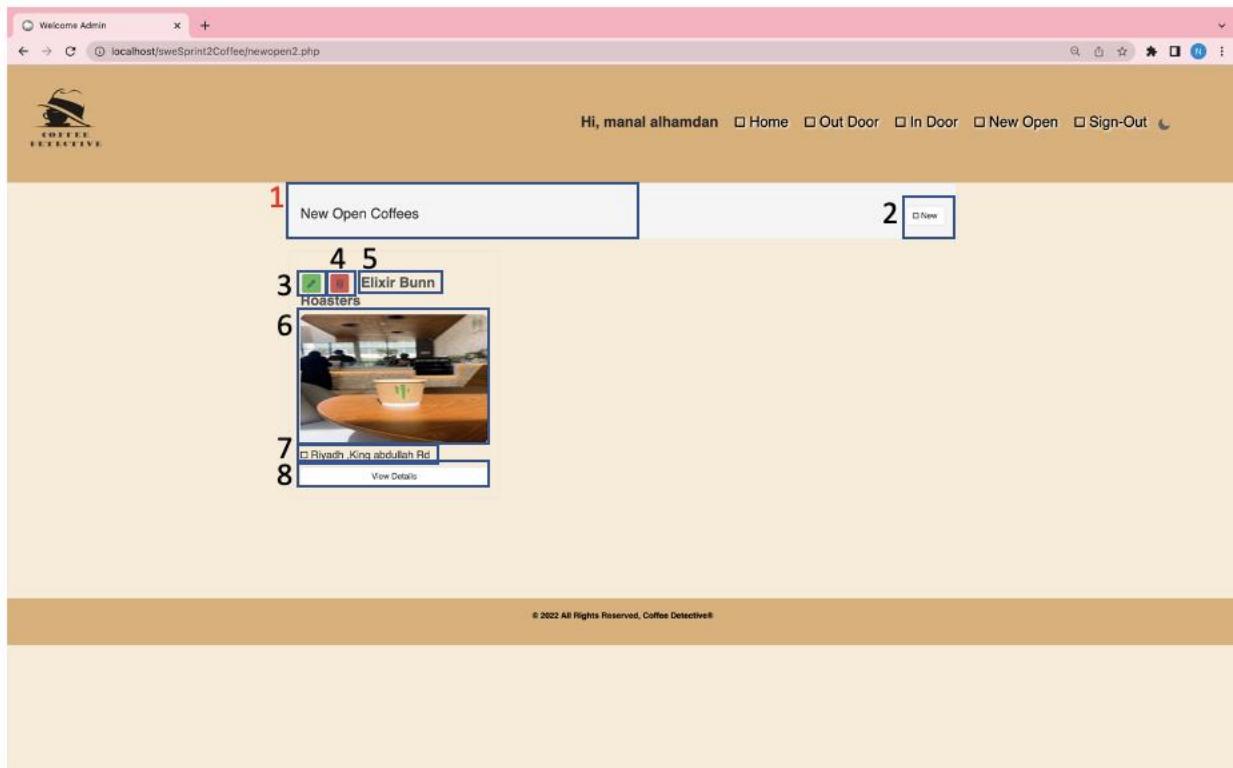
#	Description
1	System feedback response for the new coffee shop added successfully

IT 320 Course Project
 Semester-2, 1443H (Spring 2022)



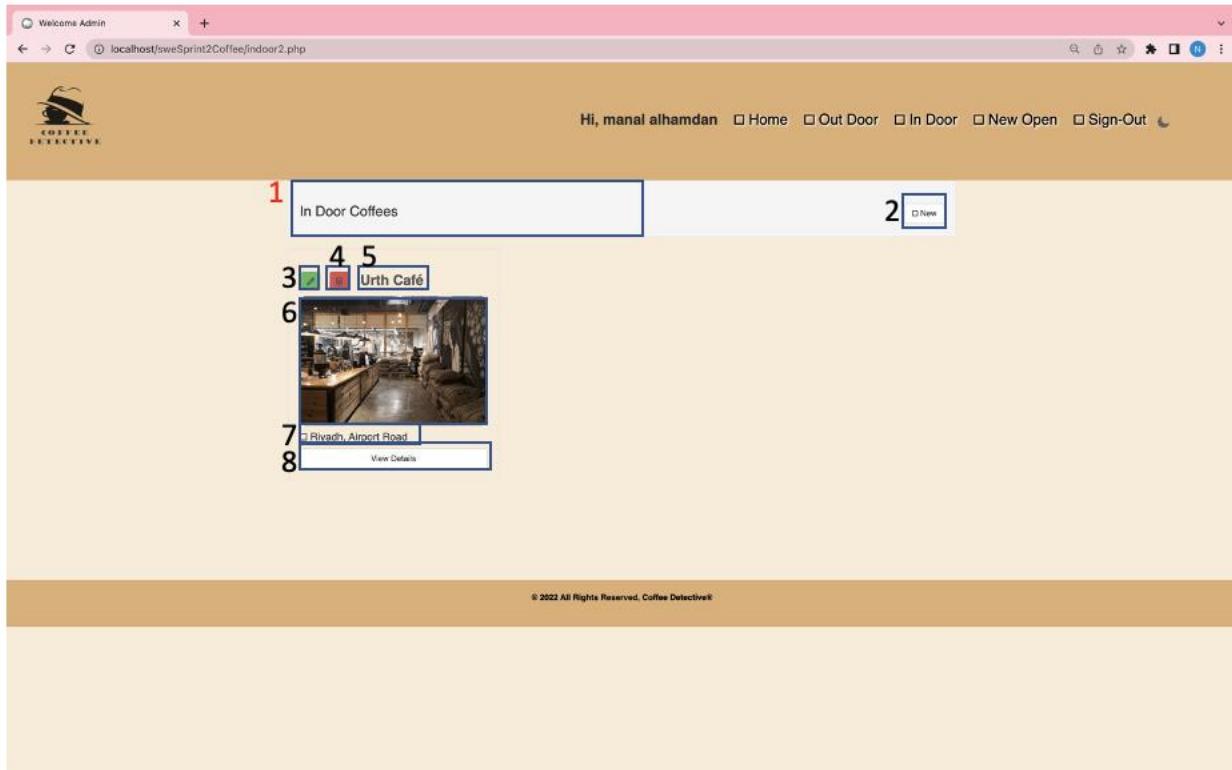
#	Description
1	Text field of the title of admin outdoor coffee shop category page
2	Button transfer the admin to add new coffee shop page
3	Button to update the information of the coffee shop
4	Button to delete the coffee shop
5	Text field for the name of the coffee shop
6	Image for the coffee shop
7	Text field for the address of the coffee shop
8	Button to view the details of the coffee shop

IT 320 Course Project
 Semester-2, 1443H (Spring 2022)



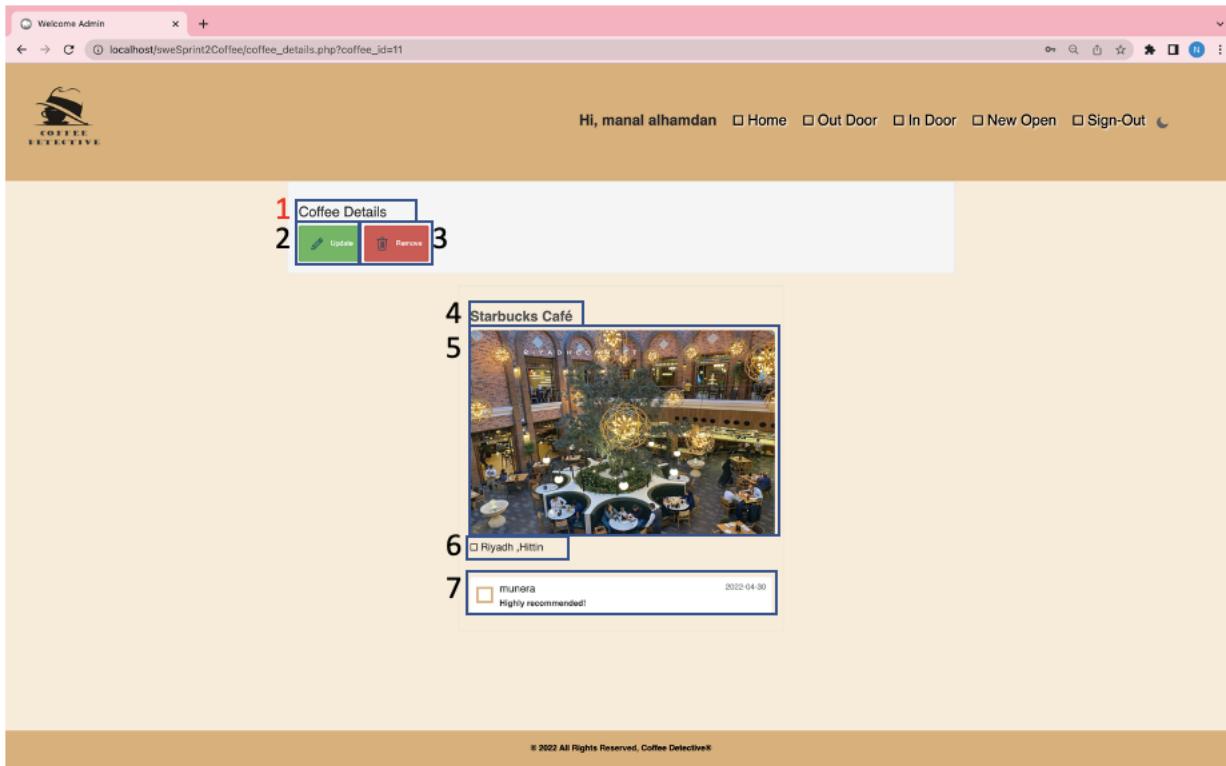
#	Description
1	Text field of the title of admin Newly opened coffee shop category page
2	Button transfer the admin to add new coffee shop page
3	Button to update information of the coffee shop
4	Button to delete the coffee shop
5	Text field for the name of the coffee shop
6	Image for the coffee shop
7	Text field for the address of the coffee shop
8	Button to view the details of the coffee shop

IT 320 Course Project
 Semester-2, 1443H (Spring 2022)



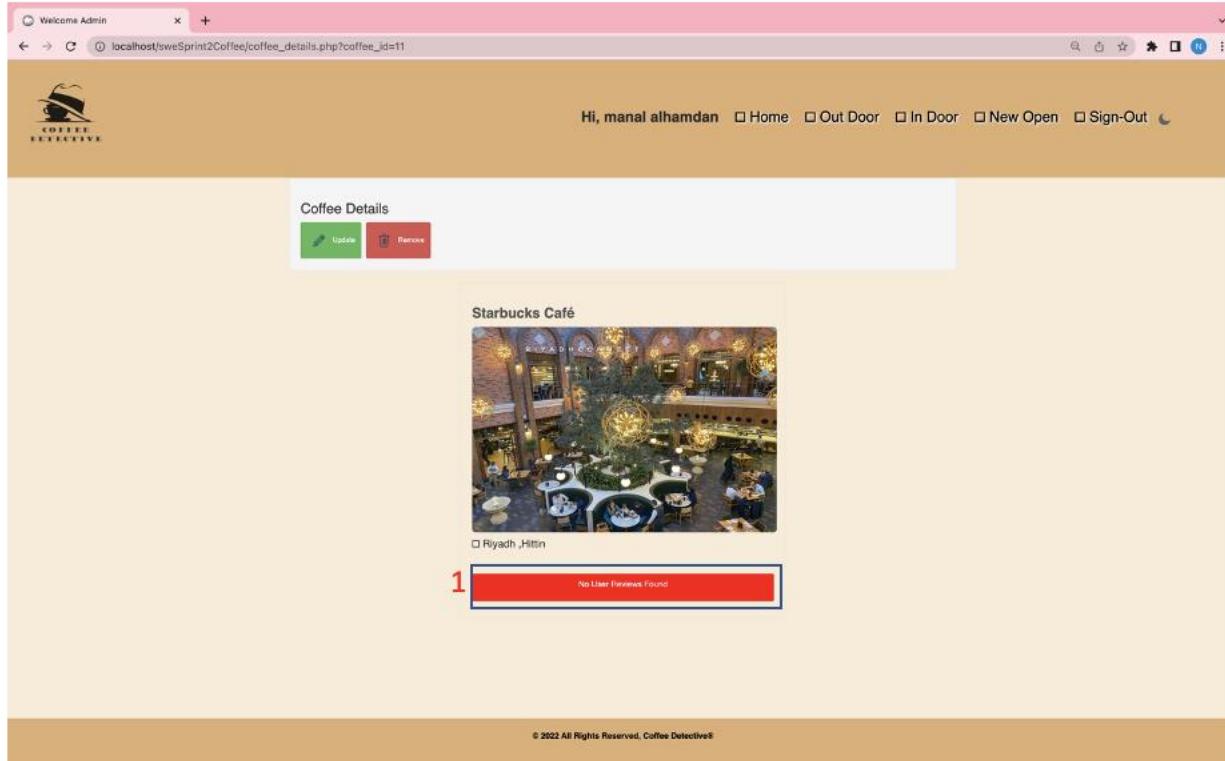
#	Description
1	Text field of the title of admin indoor coffee shop category page
2	Button transfer the admin to add new coffee shop page
3	Button to update information of the coffee shop
4	Button to delete the coffee shop
5	Text field for the name of the coffee shop
6	Image for the coffee shop
7	Text field for the address of the coffee shop
8	Button to view the details of the coffee shop

IT 320 Course Project
 Semester-2, 1443H (Spring 2022)



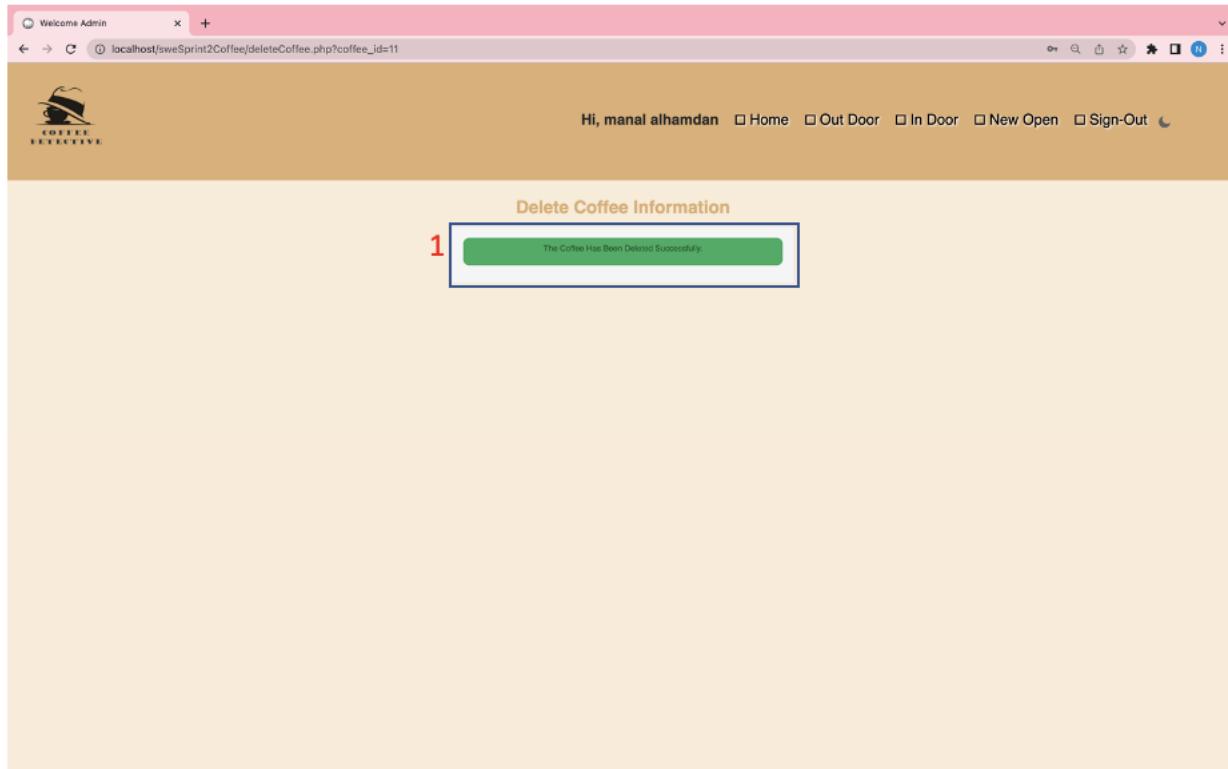
#	Description
1	Text field of the title of admin view details page
2	Button to update information of the coffee shop
3	Button to delete the coffee shop
4	Text field for the name of the coffee shop
5	Image for the coffee shop
6	Text field for the address of the coffee shop
7	Text field for the reviews about the coffee shop

IT 320 Course Project
Semester-2, 1443H (Spring 2022)



#	Description
1	System feedback response to admin if there are no reviews of the coffee shop found

IT 320 Course Project
Semester-2, 1443H (Spring 2022)



#	Description
1	System feedback response for the coffee shop was deleted successfully

IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

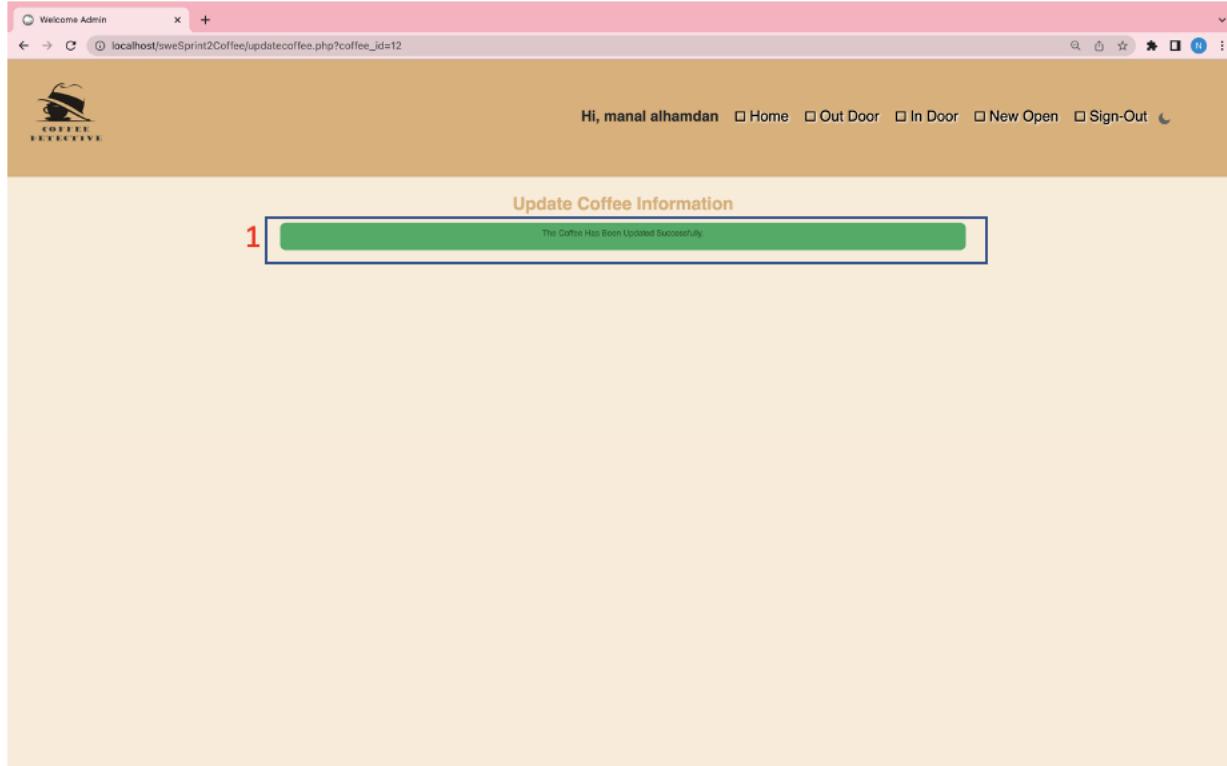
The screenshot shows a web browser window with the URL `localhost/sweSprint2Coffee/updatecoffee.php?coffee_id=12`. The page title is "Welcome Admin". The main content is a form titled "Update Coffee Information" with the following fields:

- Coffee Type**: A dropdown menu with "In Door" selected.
- Coffee Shop Name**: A text input field containing "Lith Cafe".
- Address**: An input field containing "Riyadh, Airport Road".
- Coffee Photo**: A file input field with the placeholder "Choose File: No file chosen".
- Check here to notify the users**: A checkbox.
- Update**: A blue button.

A preview image of the coffee shop is shown on the left side of the form area. The number 2 is placed over the preview image, and numbers 3 through 12 are placed next to the corresponding form fields and buttons.

#	Description
1	Text field of the title of admin update coffee shop page
2	Image for the selected coffee shop
3	Text field for the coffee type
4	Drop down menu to select the category type of the updated coffee shop
5	Text field for the coffee shop name
6	input field to write the name of the coffee shop
7	Text field for the coffee shop address
8	input field to write the address of the coffee shop
9	Check option to choose to notify the user about the coffee shop that has been updated
10	Text field for the coffee shop photo
11	Button to upload image for the coffee shop
12	Button to update the selected coffee shop

IT 320 Course Project
Semester-2, 1443H (Spring 2022)



#	Description
1	System feedback response for updated the coffee shop successfully

IT 320 Course Project
Semester-2, 1443H (Spring 2022)

5 Chapter 5: Implementation

This chapter covers our system implementation in detail, it discusses implementation steps and procedures such as software components we used during developing Coffee Detective. It also contains elements and challenges we faced during the implementation.

- **Steps**

- 1-picking user story (describes a piece of functionality) to implement.
- 2-breaking down the user story into tasks (convert a user story into a working software).
- 3-developing the system's front end.
- 4-creating the system database using phpMyAdmin.
- 5-downloading the necessary software to start with the back end.
- 6-writing the code for the back-end functionalities.
- 7-release the final product to the user.

- **Elements**

First, we used GitHub and Jira as a collaboration hosting platform so that we can upload our code, user stories and commit new challenges and resolve any conflicts. Then, we used VisualStudioCode to develop the system Frontend using HTML, CSS, JavaScript programming languages, after that we started the system backend using phpMyAdmin and it is used as local server and the system's database, and NetBeans Apache, MAMP, html, CSS, JS, PHP to fulfil system requirements and deliver Coffee Detective website.

The software tools used to implement Coffee Detective:

GitHub: is a provider of Internet hosting for software development and version control using Git

Jira: is a proprietary issue tracking product developed by Atlassian that allows bug tracking and agile project management.

VisualStudioCode: is a streamlined code editor with support for development operations like debugging, task running, and version control.

NetBeans Apache: (IDE) that enables you to develop desktop, mobile and web applications.

MAMP: is a solution stack composed of free and open-source and proprietary commercial software used together to develop and run dynamic websites.

HTML: is the standard markup language for documents designed to be displayed in a web browser.

CSS: is a style sheet language used for describing the presentation of a document

JavaScript: is a programming language that is one of the core technologies of the World Wide Web

PHP: is a server-side scripting language. that is used to develop Static websites or Dynamic websites or Web applications.

PhpMyAdmin: phpMyAdmin used to perform most administration tasks, including creating a database, running queries, and adding user accounts.

- **Challenges.**

We faced challenges and difficulties while developing coffee detective websites, at first, during the Requirements Engineering we couldn't find a suitable Interviewer easily and most of them refused to make the interview. Also, we find difficulty choosing the way and implementing the code for notifying the user when a new coffee shop has opened, sorting the coffee shops in newly open coffee shop category based on newest or oldest coffee shops. We also faced a major challenge inserting the coffee shop in the right category in the Database table and the category based on newest or oldest coffee shops. We started searching for solutions to these challenges by asking experts and watching tutorial videos.

IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

- link to the project GitHub repository:
<https://github.com/HadeelQu/SWEFinal-Release>

6 Chapter 6: Testing

Testing is all about providing feedback on the final product if it meets the business requirements. In this chapter, we fill a table to test User Story Acceptance Testing which determines if a user story fulfills its purpose from the user's perspective, then Integration Testing by providing integration hierarchy and an integration testing plan for each individual components of the system. Followed by User Acceptance Testing where we tested 7 System Users (our target audience) and collected their feedback by asking them 8 questions and let them perform 8 tasks in our system, then displaying the results.

6.1 User Story Acceptance Testing

In this section we are using user story acceptance testing to determine whether a user story fulfills its purpose from the user's perspective and test action(s) which it is scenario to test each acceptance criteria.

Sprint Number	User story	Acceptance criteria	Test action(s)	Pass?	Comments
2	As an admin I want to Sign up so that I can create my own profile and manage it.	-As an Admin if I go to the sign-up page and fill in all the required fields (First and Last name, Username, Password) and with correct format and click on sign up the message “the sign up was Successfully done” appears.	Tried a combination of correct First and Last name, Username, Password	yes	
		-As an Admin if I go to the sing up page and forget to fill one or more of the required fields or invalid format and click on sign up then it indicted me to fill all fields or entered input with correct format.	Tried to leave some filed or all blank or entered invalid format (invalid password first name, last name)	yes	

IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

		-As an Admin if I go to the sing up page and fill all required fields in sign up but the username already exists then the message "The admin username is already found into database" will appear.	Tried a combination Of username which already exists.	Yes	
2	As an admin I want to login with my username and password so that I can authenticate against my profile.	-As an Admin if I go to the log in page and enter my Username and password click on log in then the system should allow me to access the information associated to me.	Tried entering correct Username and with correct password.	yes	
		As an Admin if I go to the log in page and enter my username and password but with incorrect password or username and click on log in then the log in fails with an error massage that specifies that the username or password was wrong.	Tried a combination of incorrect username and passwords.	yes	
2	As an admin I want to logo out so that I can keep my account secure form people who is may be using my devices.	As an admin if I click on the log out button the system should show me massage indicate that I have logged out.	Click on log out button after login or sing up.	yes	
2	As an admin I want to be able to add coffee shops so that users can view and review coffee shops.	As an admin if I go to the add a coffee shop and fill all the required information and click on add coffee shop and it was successfully added then the system should indicate that I have add a coffee shop.	Tried to add coffee shop for all category and fill all the required information and click on add coffee shop.	yes	
		As an admin if I go to the add a coffee shop and forget to fill all required fields then the system indicted me to fill all fields.	Tried to add coffee shops without fill all the required information.	yes	

IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

2	As an admin I want to be able to add the newly open coffee shops at their category so that users can view new opened coffee shop notification and review them.	As an admin if I go to the add a newly open coffee shop and fill all the required information and click on add coffee shop and it was successfully added then the system should indicate that I have add a coffee shop.	Tried to add new open coffee shops and fill all the required information and click on add coffee shop.	yes	
		As an admin if I go to the add a new coffee shop and forget to fill one or more required fields then the system indicated me to fill all fields.	Tried to add new open coffee shops without fill all the required information.	yes	
2	As a user I want to search about specific category of coffee shops so I can see a list of coffee shops matching my search in easy way.	As a user if I click on a specific category then a list of coffee shops will appear with matching category.	Tried to click different categories.	yes	
		As a user if I click on a specific category but if the category was empty then a message will appear that indicates that no coffee shops yet.	Tried to click a category that empty.	Yes	
2	As an admin, I want to update coffee shops so that the coffee could be up to date.	As an admin If I go to the update coffee shop page and fill in all required information and then click update then a confirmation message will indicate that I have updated the coffee shop.	Tried to update different coffee shops and with various categories.	yes	
		As an admin If I want to update items that I choose but the update was not successful because there are empty fields then the system will indict me to fill all the fields.	Tried to update coffee shops without fill all the required information.	yes	
2	As an admin I want to delete coffee shop so that I can have more flexibility to remove coffee shops that I don't need.	As an admin If I choose a coffee shop to delete and click delete then a confirmation message indicates that that the coffee shop is deleted successfully.	Tried to delete different coffee shops with various categories.	yes	
2	as user I want to be notified about new opened coffee shops so that I can get to know about new opened coffee and try them.	As a user if there was a new opened coffee shop then I want the system to notify me when there is a new available coffee shop.	If the amine adds a newly opened coffee shop, and then He said to the user to check if there notified with red color in the newly open coffee shops category	yes	
		As a user, if there were no new coffee shops then the system should indicate to me that there is no new coffee shop.	If the amine did not add a newly opened coffee shop or if He updates to be not notified to the user, and then He said to	Yes	

IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

			the user to check if there was no notification.		
2	as a user I want to view reviews so I can benefit from other reviews and decide whether I am interested in visiting it or not.	AS a user if I choose a category and then choose the coffee shop then I should be able to see all reviews.	Tried to click on the different categories and different coffee shops and I tried to see if I can see the reviews.	yes	
		AS a user if I choose a category and then I choose coffee, but the coffee was not reviewed yet the system should indicate me there are no reviews yet on this coffee shop.	Tried to click on the different categories and different coffee see if their coffee shops that were not reviewed have messages indicating there are no reviews yet on this coffee shop.	Yes	
2	As a user I want to post review with date so I can share my experience about the coffee shop.	As a user, if fill all required fields of post, then should be posted in the system.	Tried to post review in different coffee shops after completing all information.	yes	
		if the review was not successful because there are empty fields then the system indicates that the review was not successfully posted.	Tried to post a review in different coffee shops without completing all information to see if the system indicates fill all required fields.	yes	
2	As an admin I want to view coffee shops and the reviews on coffee shops so that I can trace my system very well.	As an admin if I go to coffee shops page, I want to be able to see list of the available coffee shops and if I choose a specific one I will be able to see the reviews on that coffee shops if any and if there are no reviews, yet the system will show a message that there are no reviews.	Tried to click on the different categories and see if their coffee shops were not reviewed has messages indicate are no reviews yet on this coffee shop .and if there are reviews, I can see them.	Yes	
2	As a user, I want to sort reviews based on data ascending or descending so that help me to know about oldest and newest review.	As a user, if I review the reviews of coffee shops and click on sort reviews based on dates ascending or descending then they will be Sorted based on which type of sort I chooses.	Tried to click on the different categories and different coffee shops and tried to see if I can sort the reviews by ascending or descending	Yes	
2	As a user, I want to learn how to use the	As a user, if I want to perform any functions of the system	will be given to 5 users with specific	Yes	

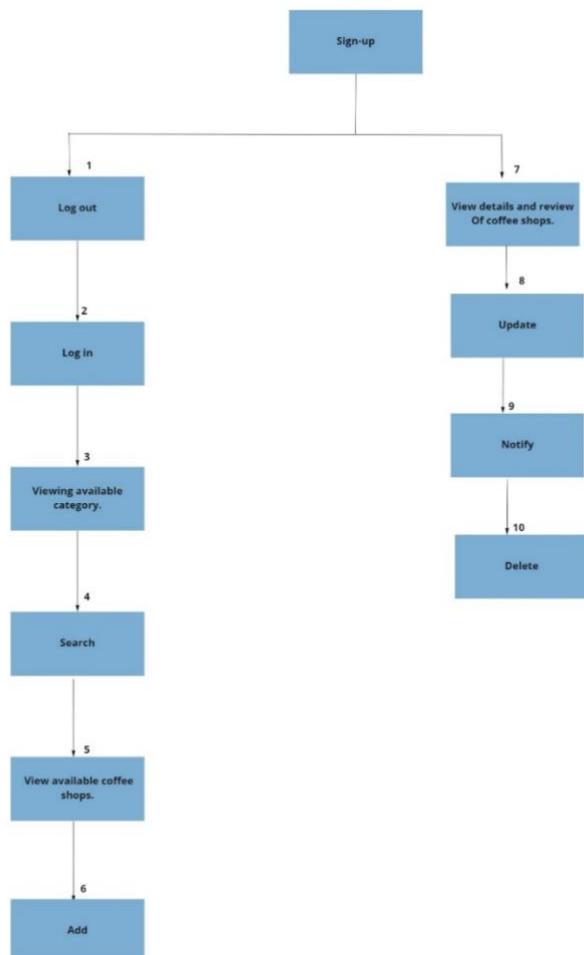
IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

	main functionality of the system within 5-10 minutes so that I save my time and don't get frustrated and find another site to use.	I can learn how to use it within 5-10 minutes.	task to perform in order to manage the time needed and we will consider it acceptable if the time was 5-10 min To interact with the system.		
2	As a user, I want the website to be available 95% of the time so that I can see the reviews whenever I try to access the website	As I user, if I access the website then it is available 95% of the time.	We try to access the website at different times and try to access it when there are a lot of users on the website.	yes	

6.2 Integration Testing

In this section, we are using integration testing to check how individual components interact when integrated into a system and see if it works correctly or there is a problem that need to be fixed using our navigation diagram.

Admin:



miro

IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

System components	New component	Test case	Pass?	Comments
1. Sign-up	Log out	<ul style="list-style-type: none"> An admin was Sign-up in the system successfully. An admin was logged out from the system successfully. 	Yes	
1. Sign-up 2. Log out	Log in	<ul style="list-style-type: none"> An admin was Sign-up in the system successfully. An admin was logged out from the system successfully. The admin clicks login and fills all required fields with correct information then logs in to the system successfully. 	Yes	
1. Sign-up 2. Log out 3. Log in	Viewing available category.	<ul style="list-style-type: none"> An admin was Sign-up in the system successfully. An admin was logged out from the system successfully. The admin clicks login and fills all required fields with correct information then logs in to the system successfully. View available category 	Yes	
1. Sign-up 2. Log out 3. Log in 4. Viewing available category.	Search	<ul style="list-style-type: none"> An admin was Sign-up in the system successfully. An admin was logged out from the system successfully. The admin clicks login and fills all required fields with correct information then logs in to the system successfully. View available category. search for a category 	Yes	
1. Sign-up 2. Log out	View available coffee shops.	<ul style="list-style-type: none"> An admin was Sign-up in the system successfully. 	Yes	

IT 320 Course Project

Semester-2, 1443H (Spring 2022)

3. Log in 4. Viewing available category. 5. Search		<ul style="list-style-type: none"> An admin was logged out from the system successfully. The admin clicks login and fills all required fields with correct information then logs in to the system successfully. View available category. search for a category View available coffee shops. 		
1. Sign-up 2. Log out 3. Log in 4. Viewing available category. 5. Search	Add.	<ul style="list-style-type: none"> An admin was Sign-up in the system successfully. An admin was logged out from the system successfully. The admin clicks login and fills all required fields with correct information then logs in to the system successfully. View available category. search for a category View available coffee shops. Click new to add a coffee shop and fill in all required information, then click "Add new" after that the coffee will be added. 	Yes	
1. Sign-up 2. Viewing available category. 3. Search 4. View available coffee shops. 5. Add.	View details and review Of coffee shops.	<ul style="list-style-type: none"> An admin was Sign-up in the system successfully. An admin was logged out from the system successfully. The admin clicks login and fills all required fields with correct information then logs in to the system successfully. View available category. search for a category View available coffee shops. 	Yes	

IT 320 Course Project

Semester-2, 1443H (Spring 2022)

		<ul style="list-style-type: none"> Click new to add a coffee shop and fill in all required information, then click "Add new" after that the coffee will be added. The admin selects view details from one of the available coffee shops and then the admin can review the details and reviews. 		
<ol style="list-style-type: none"> Sign-up Viewing available category. Search View available coffee shops. Add View details and review Of coffee shops. 	Update	<ul style="list-style-type: none"> An admin was Sign-up in the system successfully. An admin was logged out from the system successfully. The admin clicks login and fills all required fields with correct information then logs in to the system successfully. View available category. search for a category View available coffee shops. Click new to add a coffee shop and fill in all required information, then click "Add new" after that the coffee will be added. The admin selects update and after filling in all required information, then click on "Update" after that the coffee will be updated. 	Yes	
<ol style="list-style-type: none"> Sign-up Viewing available category. Search View available coffee shops. Add View details and review 	Notify	<ul style="list-style-type: none"> An admin was Sign-up in the system successfully. An admin was logged out from the system successfully. The admin clicks login and fills all required fields with correct 	Yes	

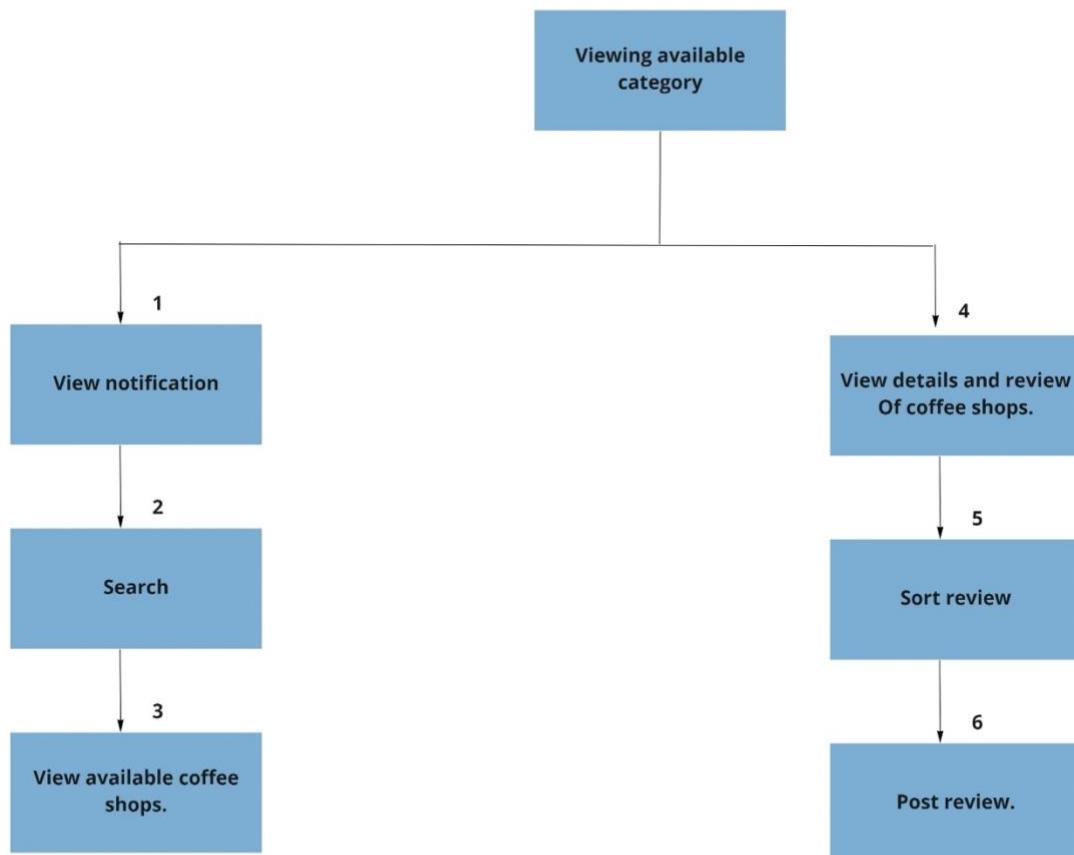
IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

	Of coffee shops.		<ul style="list-style-type: none"> information then logs in to the system successfully. • View available category. • search for a category • View available coffee shops. • Click new to add a coffee shop and fill in all required information, then click "Add new" after that the coffee will be added. • The admin selects update and after filling in all required information, then click on "Update" after that the coffee will be updated. • The admin selects update or add for type "Newly Opened Coffee Shops" shops and fill in all required information and click to notify Then a notification will be shown to the user about new coffee shops. 		
	<ol style="list-style-type: none"> 1. Sign-up 2. Viewing available category. 3. Search 4. View available coffee shops. 5. Add 6. View details and review Of coffee shops. 7. Update 	Delete	<ul style="list-style-type: none"> • An admin was Sign-up in the system successfully. • An admin was logged out from the system successfully. • The admin clicks login and fills all required fields with correct information then logs in to the system successfully. • View available category. • search for a category • View available coffee shops. • Click new to add a coffee shop and fill in all required information, then click "Add new" after that the coffee will be added. • The admin selects update and after filling in all required information, then click on "Update" after that 	Yes	

IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

		<p>the coffee will be updated.</p> <ul style="list-style-type: none"> • The admin selects update or add for type “Newly Opened Coffee Shops” shops and fill in all required information and click to notify Then a notification will be shown to the user about new coffee shops. • The admin click delete then. the coffee shop will be deleted. 		
--	--	---	--	--

User:



IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

System components	New component	Test case	Pass?	Comments
1. Viewing available category.	View notification	<ul style="list-style-type: none"> The View available category successfully. View notification for type “Newly Opened Coffee Shops” 	Yes	
1. View available coffee shops. 2. View notification	Search	<ul style="list-style-type: none"> View available category. View notification for type “Newly Opened Coffee Shops” search for a category 	Yes	
1. View available coffee shops. 2. View notification 3. Search	View available coffee shops.	<ul style="list-style-type: none"> View available category. View notification for type “Newly Opened Coffee Shops” search for a category. View available coffee shops. 	Yes	
1. View available coffee shops. 2. View notification 3. Search 4. View available coffee shops	View details and review.	<ul style="list-style-type: none"> View available category. View notification for type “Newly Opened Coffee Shops” search for a category. View available coffee shops. The users select view details from one of the available coffee shops and then they can review the details and reviews. 	Yes	
1. View available coffee shops. 2. View notification 3. Search 4. View available coffee shops 5. View details and review	Sort review	<ul style="list-style-type: none"> View available category. View notification for type “Newly Opened Coffee Shops” search for a category. View available coffee shops. The users select view details from one of the available coffee shops and then they can review the details and reviews. After that they can sort reviews ascending or descending. 	Yes	

IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

<ol style="list-style-type: none"> 1. View available coffee shops. 2. View notification 3. Search 4. View available coffee shops 5. View details and review. 6. Sort review 	Post review.	<ul style="list-style-type: none"> • View available category. • View notification for type “Newly Opened Coffee Shops” • search for a category. • View available coffee shops. • The users select view details from one of the available coffee shops and then they can review the details and reviews. • After that they can sort reviews ascending or descending. • Post review after fill all required information and click “Post Review”. 	Yes	

6.3 User Acceptance Testing

The User Acceptance Testing is a major step in evaluating our website or any other applications as it checks if the system fulfills business requirements and helps in assessing whether the system meets the required specification or not. Our test was performed with 7 participants. We took our testing sample of users and we let them sit in a quiet room where they can focus. Then we gave them different tasks to perform and gave them 7 questioners questions and collected their feedback on the system then displayed the results.

IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

6.3.1 Demographics of participants

Table 1 below shows the demographic information of participants in the User Acceptance Testing. **Participants 1,2 and 5 are admins where the others are users.**

Participant NO	level of experience in usage of websites	Gender	Age	How many times do they visit a coffee shop review site or application a year
1	Expert	Female	21	2-5
2	Average	Female	27	10+
3	Average	Male	15	5-10
4	Average	Female	43	6-9
5	Average	Male	42	1-2
6	Expert	Male	18	10+
7	Expert	Female	33	10+

We will be testing 7 participants including the admin, who are most likely people that admire coffee and are willing to try any coffee shop. On the other hand, we have users who are looking for reviews and feedback on Riyadh coffee shops. There is variety in the age, gender, and the level of the technology experience.

6.3.2 Questionnaire

Our participants were asked to perform a set of tasks, Table 2 shows those tasks. The tasks performed by the participants and their feedback will help us to know user needs for future work. Table 3 shows the questions we asked the user and collecting their feedback on the system. The numbers represent the participants in the table above.

Task description	Agree	Neutral	Disagree	comments
Sign Up function	1,2,5			
Log in function	1,2,5			
Try to search about specific category	1,2,3,4,6,7	5		-If the search was in a search bar it would be better
Post review	6,7	3	4	-I suggest being able to add replies to other user's reviews. -I want to edit my review -it would be better if I could give a reaction on reviews

IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

				(heart, smile, thumbs up)
The admin tries to Add coffee shop	1,2,5			
The admin tries to delete a coffee shop after adding it	1,2,5			
The admin tries to update coffee shop after adding it	1,2,5			
How the items are viewed in admin and users home page	1,2,3,4,5,6,7			

Table 2

The results that we found after implementing the User Acceptance Test were nearly positive expect participant No5,3,4 and from their comment, we have understood their suggestion and we found that the overall system requirements are well preformed and that there will be no surprises when the product is released to the production/market for actual use.

	Yes	Neutral	No	Comments
1. Did you face any challenges using Coffee Detective website?	1,2,4,5,6,7	3		
2. Did you find Coffee Detective perfect for a review website system?	1,2,3,7	4,6	5	
3. Did you find the coffee shop you are looking for faster and in a more efficient way?	1,2,3,4,6,7	5		
4. Did you find the interface and icons used system friendly and not confusing?	1,2,3,4,5,6,7			
5. Were you able to navigate between pages easily?	1,2,3,4,5,6,7			
6. After using Coffee Detective will you recommend it to your friends?	1,2,3,4,6,7	5		
7. Do you have any other functionality you wish you find in Coffee Detective?	3,4,5		1,2,6,7	-Search bar -reply to reviews -reaction on reviews -edit reviews -post voice reviews

Table 3

IT 320 Course Project
Semester-2, 1443H (Spring 2022)

Questioner results: After asking the testers and collect their feedback we found that Coffee Detective is easy to use for different people with various technical expertise they also found the interface user friendly and not confusing, they agreed that they were able to navigate between the pages Smoothly. Almost 14% of our testers agreed that they have faced challenges using the website, 43% of testers didn't find Coffee Detective a complete website for a Coffee Shop reviews System and they have given us some suggestions that we took into consideration for future work, for example, a search bar instead of categories search, edit reviews, post voice reviews.

7 Chapter 7: Conclusion and Future Work

This chapter represents our document conclusion and future work.

7.1 Conclusion

This document represents our journey with Coffee Detective website starting from the introduction chapter which clarifies the system idea and gives a general overview of the system. Introduction chapter followed by the Domain Analysis chapter which gives the general field of business or technology in which the customers expect to be using the software. The goal of domain analysis is to understand the background needed to be able to understand the problem. In the Requirements Engineering chapter we translate the imprecise, incomplete needs and wishes of the potential users of software into complete formal specifications (user stories). In the system design chapter, we defined the components, modules, interfaces, and data for a system to satisfy specified requirements. Finally, the last two chapters implementation and testing, the software implementation stage involves the transformation of the software technical data package into integrated and tested software configuration items that are ready for software acceptance testing. Where the testing chapter we provided an integration hierarchy and an integration testing plan.

7.2 Future Work

Coffee Detective website is an English website system designed to help users search for coffee shops in Riyadh city in categories. Coffee Detective website at this stage doesn't support Arabic language, available only for Riyadh coffee shops and the user doesn't have a personal profile. So as future work, Coffee Detective will allow the user to create their own profile so they can save and monitor their favorite coffee shops, also supporting Arabic language so non-English speakers can use the website. Coffee Detective will be able to provide review of all Saudi coffee shops and of course considering our target users comments that we collected during User Acceptance Testing.

8 References

Any references in the report should be included in this section. Always give complete citations for references cited in your report. A proper reference involves two components: the citation in the text and the complete bibliographic entry in the References section. It is recommended to generate the references automatically (use "References" menu in Word, "Insert Citation"), or external plugin like Zotero. Use the Institute of Electrical and Electronics Engineers (IEEE) style for referencing. For more information see:

<http://wwwlib.murdoch.edu.au/find/citation/ieee.html>

<http://wwwlib.murdoch.edu.au/find/citation/ieee.html>

IT 320 Course Project

Semester-2, 1443H (Spring 2022)

<https://www.guru99.com/test-scenario.html>

<https://www.guru99.com/component-testing.html>

<https://asana.com/resources/how-project-objectives>

<https://hedigitalprojectmanager.com/project-objectives/>

[https://www.comunicaffe.com/saudi-arabia-is-the-fastest-growing-coffee-market-in-the-middle- east/](https://www.comunicaffe.com/saudi-arabia-is-the-fastest-growing-coffee-market-in-the-middle-east/)
<http://wwwlib.murdoch.edu.au/find/citation/ieee.html>

<https://www.knowledgehut.com/tutorials/scrum-tutorial/definition-of-ready>

<https://www.mountaingoatsoftware.com/blog/non-functional-requirements-as-user-stories>

<https://app.createely.com/d/M0xS70dfryX/edit>

9 Appendices

Interview1:

Interview Outline	
Interviewee: Nouf Alfulaij	Interviewer: Raghad Alothman
Location: Zoom meeting	Appointment Date: 06-03-2022 Start time: 12:08 pm End time: 12:43 pm
Objectives: <ul style="list-style-type: none">• Collect data about the system function• Understand what the user likes/want in review websites domain.	Reminders: The Interviewee is a student who's interested in coffee making
Agenda: <ul style="list-style-type: none">• Introduction• Project Background• Overview of the interview (topics covered)• Interview questions• Closing	Approximate Time: <ul style="list-style-type: none">• 3 minutes• 8 minutes• 5 minutes• 17 minutes• 2 minutes

IT 320 Course Project
Semester-2, 1443H (Spring 2022)

General observation: The Interviewee was relaxed and excited to answer our interview questions since she's interested in the coffee field. She gave us helpful opinions and information that will help us to enhance our system requirements.

Questions:	Note:
Question1: do you usually know about newly opened coffee shops? If so, how do you know about them?	Answer: yes, sometimes from ads on tv or ads on social media also from my friends Observations: there is no specific place she gets the news from
Question2: would you like to search about specific coffee shops?	Answer: I prefer to search for it in an easy way so that I can decide in a short time, for example: write specific words in search then it suggests to me what I want, also, find what I want in specific place on the website. Observations: it seems like she will find the idea of searching in a category way helpful for her.

IT 320 Course Project
Semester-2, 1443H (Spring 2022)

<p>Question3: why do you think it is important to see the reviews of coffee shops?</p>	<p>Answer: I usually before going to coffee shop search on twitter or any social media app what people said about it so that I decide in a very short time to save my time if I want to go or not.</p> <p>Observations: the most reason for her is to save time.</p>
<p>Question4: In your opinion, what is the most important feature that should be on our website?</p>	<p>Answer: I think you can add voice Note for adding review to give it in clear way</p> <p>Observations: great idea, it will be a feature requirement</p>
<p>Question5: have you ever tried a coffee shop based on some advertisements on social media? Has the coffee shop reached your expectations, or do you think it was overrated?</p>	<p>Answer: yes, sometimes it does and most of the time not, so I usually do not depend on these ads.</p> <p>Observations: she is a cautious person</p>

Summary for interview 1: According to the interview results we figured out that our website should implement an easy UI so that the user can interact with our website easily, search in category way will be helpful to users who want to save their time, our website will help users to inform them about any coffee shops. In the future we will develop requirements with high professional skills that satisfy different users' preferences inshallah.

IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

Interview 2:

Interview Outline	
Interviewee: Seba alahmadi	Interviewer: Reema alotaibi
Location: Zoom meeting	Appointment Date: 05-03-2022 Start time: 8:30 pm End time: 9:05 pm
Objectives: <ul style="list-style-type: none"> Collect data about the system function Understand what the user likes/want in review websites domain. 	Reminders: The Interviewee is a mom and doctor who is interested in coffee shops
Agenda: <ul style="list-style-type: none"> Introduction Project Background Overview of the interview (topics covered) Interview questions Closing 	Approximate Time: <ul style="list-style-type: none"> 3 minutes 8 minutes 5 minutes 17 minutes 2 minutes
General observation: The Interviewee was very honest in her answers which help us to discover ways to improve our website and she seems to like to spend her free time in a good coffee shop	
Questions: Question1: do you usually know about newly opened coffee shops? If so, how do you know about them?	Note: Answer: Not always but I try to be up to date with the interesting new coffee shops, sometimes find about them through social media and friends Observations: she seems to use social media frequently

IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

<p>Question2: how would you like to search about specific coffee shops?</p>	<p>Answer: usually by asking people who tried it about their opinion about the coffee shop and sometimes I try to search and find reviews for specific coffee shop in google maps to see the reviews of people who really tried it</p> <p>Observations: she tries her best to discover good coffee shops</p>
<p>Question3: why do you think it is important to see the reviews of coffee shops?</p>	<p>Answer: I think that before visiting any coffee shop it is particularly important to see others review because after seeing the reviews of the coffee shop that I want to visit I will have an expectation about what I am going to visit and if it allows children or not so I can decide to visit with or not</p> <p>Observations: she Cares about her coffee shop experience</p>
<p>Question4: In your opinion, what is the most important feature that should be on our website?</p>	<p>Answer: for me as a coffee lover who always wants to try different coffee shop and like to be one of the first people who tried any new opened coffee shop, I would like to be notified about any new opened or popped coffee shop in Riyadh so I can get to try them as fast as possible</p> <p>Observations: seems extremely excited to try new coffee shops</p>
<p>Question5: have you ever tried a coffee shop based on some advertisements on social media? Has the coffee shop reached your expectations, or do you think it was overrated?</p>	<p>Answer: yes for sure , to be honest the coffee shops that I tried after an ad in social media some of them was overrated for sure because at the end it was a paid ad so they are trying to make people visit the coffee shop as much as they can but in the other hand some of the coffee shops was amazing and I felt glad that I get to know about them through social media ad.</p> <p>Observations: she looked a little bit concerned at the beginning about her answer but so honest at the same time</p>

IT 320 Course Project
Semester-2, 1443H (Spring 2022)

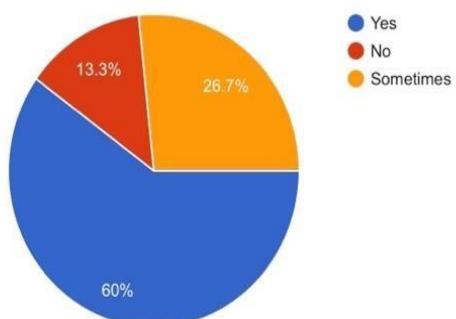
Summary for interview 2: According to the interview results we figured that people usually have diverse needs when they visit a coffee shop like Reema she would like to visit a coffee shop that welcomes children ...etc., plus Reema wants to know more new coffee shops which our website will help her inthis by notifying her with new opened coffee shops

IT 320 Course Project
 Semester-2, 1443H (Spring 2022)

Questioner:

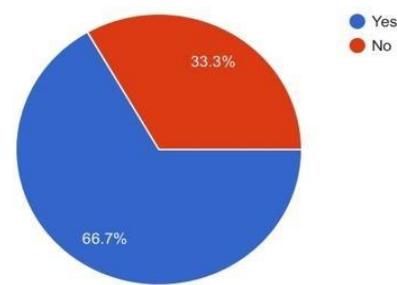
? Do you prefer going out for a coffee

لـ 15



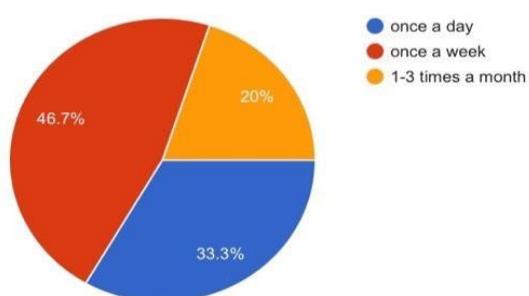
Have you ever suffered learning how to use a website or find it difficult to use? (Took you 15 min or more)

لـ 15



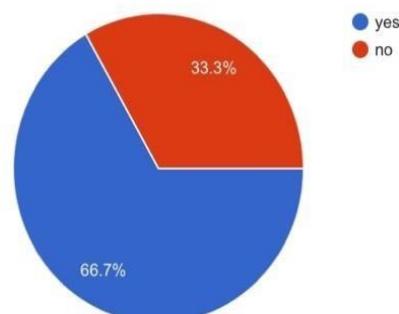
How many times do you check coffee shops review website

لـ 15



? Do you find difficulty finding coffee shops

لـ 15

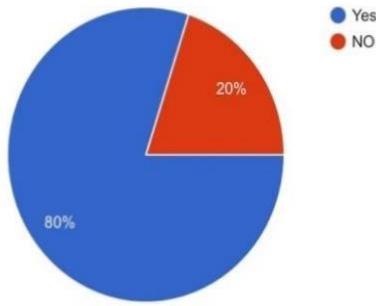


IT 320 Course Project

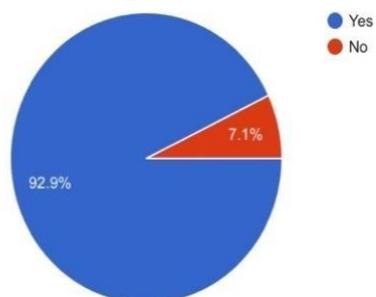
Semester-2, 1443H (Spring 2022)

كلية علوم الحاسوب والمعلومات
 قسم تقنية المعلومات

Have you tried an advertised coffee shop
 ?that turned out to be unprofessional



Do you think if you get up to dated and
 notified with new opened coffee shops will
 ?encourage you to try them



Summary: According to the Questioner results we found that 92.9% of our sample agreed that if they get notified when new coffee shop open, it will encourage them to visit that coffee shop. also, 80% of them have had unprofessional experience with coffee shops because they did not get the honest review, more than 50% of our sample prefer going out to take a coffee and they also find difficulty choosing the right coffee shop to visit, we also must keep in mind that we must provide a good user experience, so users do not suffer using our website.

1.1.1.1 Our PBI in Jira management system:

The screenshot shows the Jira Software interface with the following details:

- Project:** '2022-it320-m3'
- View:** Backlog
- Sprint:** QU2022 Sprint 0 (12 Mar – 26 Mar) (14 issues)
- Issues:**
 - QU2022-1: As an admin I want to Sign up so that I can create my own profile and manage it.
 - QU2022-2: As an admin I want to login with my username and password so that I can authenticate against my profile.
 - QU2022-3: As an admin I want to logo out so that I can keep my account secure from people who may be using my devices.
 - QU2022-4: As an admin I want to be able to add coffee shops so that users can view and review coffee shops.
 - QU2022-5: As an admin I want to be able to add the new open coffee shops at their category with their launching date so that users can view new opened coffee shop notification and re...
 - QU2022-6: As a user I want to search about specific category of coffee shops so I can see a list of coffee shops matching my search in easy way.
 - QU2022-7: As an admin I want to update items so that the items could be up to date.
 - QU2022-8: As an admin I want to delete coffee shop so that I can have more flexibility to remove coffee shops that I don't need.
 - QU2022-9: as user I want to be notified about new opened coffee shops so that I can get to know about new opened coffee and try them.
 - QU2022-10: As a user I want to view reviews so I can benefit from other reviews and decide whether I am interested in visiting it or not.
 - QU2022-11: As a user I want to post review so I can share my experience about the coffee shop.
 - QU2022-12: As an admin I want to view coffee shops and the reviews on coffee shops so that I can trace my system very well.
 - QU2022-13: As a user, I want to learn how to use the main functionality of the system within 5-10 minutes so that I save my time and don't get frustrated and find another site to use.
 - QU2022-14: As a user, I want the website to be available 95% of the time, so that I can see the reviews whenever I try to access the website.
- Buttons:** Complete sprint, Insights, Create issue, + Create issue, Quickstart.

IT 320 Course Project
Semester-2, 1443H (Spring 2022)

كلية علوم الحاسوب والمعلومات
قسم تقنية المعلومات

Sprint2-jira:

The screenshot shows a Jira project board for 'QU2022 Sprint 2'. The board has three columns: 'TO DO', 'IN PROGRESS', and 'DONE 14 ISSUES'. There are 14 issues listed under 'IN PROGRESS', each with a brief description and a green checkmark icon.

- As an admin I want to Sign up so that I can create my own profile and manage it. (QD00022-1)
- As an admin I want to login with my username and password so that I can authenticate against my profile. (QD00022-2)
- As an admin I want to logout so that I can keep my account secure from people who is may be using my devices. (QD00022-3)
- As an admin I want to be able to add coffee shops so that users can view and review coffee shops. (QD00022-4)
- As an admin I want to be able to add the new open coffee shop at their category with the location details so users can view new opened coffee shop notification and review them. (QD00022-5)
- As a user I want to search about specific category of coffee shops so I can get the results matching my search in easy way. (QD00022-6)
- As an admin I want to update items so that the items could be up to date. (QD00022-7)
- As an admin I want to delete coffee shop so that I can have more flexibility to remove coffee shops that I don't need. (QD00022-8)
- As a user I want to be notified about new opened coffee shops so that I can get to know about new opened coffee and try them. (QD00022-9)
- As a user I want to view reviews so I can benefit from other reviews and decide whether I am interesting in visiting it or not. (QD00022-10)
- As a user I want to post review so I can share my experience about the coffee shop. (QD00022-11)
- As a user I want to sort reviews based on the rating so that I can decide on that help me to know about old and newest review. (QD00022-12)
- As a user I want to learn how to use the main functionality of the application so that I can use that I save my time and don't get frustrated and find another site to use. (QD00022-13)
- As a user I want the website to be available all the time so that I can see the site whenever I try to access the website. (QD00022-14)

